Relationship Marketing and Client Trust Toward Contractors Within the Large Private Building Sector of the UK Construction Industry

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ABSTRACT

A history of adversarial relationships, resulting in conflict between parties involved in building projects has raised levels of perceived risk for clients working with contractors. Therefore, traditional approaches to marketing management have been found to be inappropriate. The new development in relationship marketing may assist contractors in developing more appropriate marketing strategies. However, trust is essential to the development of positive on-going relationships and if future relationship marketing strategies are going to work, this must first be addressed. With calls for the development of trust, the thesis concentrates on this, whilst taking into consideration the complex exchange process between clients and contractors existing over an extended period of time in any one project. This within what is called the Temporary Multi-organisation (TMO).

From the client decision-maker's (CDM) perspective in the large private building sector of the UK construction industry, this thesis empirically examines client attitude and consequential beliefs about, trusting contractors. It also examines contractor behaviour affecting client willingness to trust them, whilst allowing for the influence other parties within the TMO have on CDM perspective of the contractor. To do this, two models, the 'Reasoned Action Model' and 'Conditions of Trust Inventory' were executed together through a carefully designed questionnaire survey sent to key decision-makers' in 590 leading large client organisations such as BAA, British Land, and major retail, hotel and leisure companies. Depth interviews with leading UK CDM's were used in conjunction with prescribed practice to aid in the design and content of the questionnaire.

Given the history of client-contractor relationships, results revealed some interesting findings. Third party influence from architects, colleagues within the CDM's firm, contractors past clients and sub-contractors were found to be the dominant influence over CDM trust of contractors. Results also show CDM's consider being able to trust contractors as important, reasonable and beneficial. This leads to fewer problems with disclosure of information, less monitoring of contractor performance in terms of quality checks and greater likelihood of a successful project. Also, all ten 'Conditions of Trust' relating to CDM's past experience of contractor behaviour are shown to be affecting the development of trust for future projects. The research makes an original contribution, providing insight into issues affecting client trust toward contractors during projects, whilst identifying areas for action if trust is to be developed. It also provides marketing theory with an insight into trust and relationship management with the TMO, a forerunner to modern virtual organisations.

CHAPTER ONE

Introduction to the Research Study

(Words in *italic* are defined in Appendix A – Glossary of Terms)

1.0 Introduction

This thesis is concerned with *trust*. The specific focus is, clients' trust in contractors within the private building sector of the UK construction industry. The research, conducted within a marketing orientation starts with a background review of *marketing* literature, highlighting a change currently occurring in the way marketing is thought about, researched, taught and practised. Called *Relationship Marketing*, trust, is considered to be of central importance to this and would enable contractors to provide better service, greater value for money and therefore develop more satisfied clients. However, this is within an industry in which;

(i) the exchange process experienced by parties to a *building project* is highly complex because it is long term, goes through many phases and exists in what is called a *'Temporary Multi-organisation'* (TMO) (Cherns and Bryant, 1984 p.181).

(ii) the client-contractor relationships developing during these complex exchanges are influenced by third parties involved in the project, particularly the design team members.

(iii) adversarial conflict culture is a renowned feature (Kumaraswamy, 1997; Fenn and Gamson, 1992; Hellard 1988).

These cannot be ignored. Problems like these have thwarted attempts over the past 30 years to introduce marketing into the UK construction industry, because for clients' they raise levels of *perceived risk* in what is already an inherently high-risk industry. New *Relationship Marketing* tools, and more specifically *trust* management can potentially provide contractors' with more appropriate skills, enabling them to better manage the client-contractor relationship. This should help to ease problems commonly experienced in the UK construction industry, by reducing client perceived risk when selecting a contractor, whilst helping avoid adversarial behaviour which results in lack of openness

and willingness to take responsibility and, ultimately, induces conflict over time, cost and quality issues both during and after a project.

The research may help contractors enhance their service whilst improving their *reputation*. This might raise client *expectations* of a contractor's future *performance*, improving a contractor's ability to exploit future business opportunities arising from a better reputation for client satisfaction. Potentially enhancing a contractor's ability to gain competitive advantage, this research could lead to improved profitability and future survival in an increasingly competitive environment.

In order to improve relationships between clients and contractors there has been an increasing call for trust to be developed (Hailstone, 2002b p.8; Bresnen and Marshall, 2000a p.821; Bresnen and Marshall, 2000b p.233; Egan, 1988; Thompson, 1996a; Latham, 1994). However, whilst recent construction and relationship marketing literatures prescribe the importance of trust in developing new competitive strategies, there is limited empirical evidence or published work focused on understanding it, or its role in the UK construction environment. Research for this thesis is intended to do precisely that, by empirically examining clients' trust of contractors in the private building sector of the UK construction industry. In doing this it also takes into consideration the temporary nature of the project team and;

(i) the influence third parties have,
(ii) clients' expectations of contractors' future performance,
(ii) the clients' own *past experience*,
(iii) the perceived risk in their decision making process as to whether or not they can trust a contractor.

1.1 Research Focus

1. Examining all relationships between parties to a building project is too much for one Ph.D. Latham (1994 p.3) states, 'Implementation begins with clients. Clients are at the core of the process and their needs must be met by the industry'. Therefore, it was decided this study would concentrate on client perspective of client-contractor relationships. Reinforcing the need for client perspective, Egan (1998 *para.17.2*) stated, 'in the best companies, the customer drives everything'. 'Activities which do not add value from a customer's point of view are classified as a waste and eliminated'.

2. The contribution of numerous managers and professionals within a client organisation, referred to by Webster and Wind (1972 p.12) as the Buying Centre or Decision-making Unit (DMU) (Smyth, 2000 p.100) increases the already complex exchange process between client and contractor. In order to attain the sharp focus, it was decided to reduce client perspective down to that of client decision-makers.

3. Although Egan (1998 *para.*86), tells us 'the public sector is the largest client for the construction industry'. Latham (1994 p.4) had earlier said, 'the public sector is a less dominant client than it use to be', and that in the private sector, 'leading clients and firms - also have a substantial role to play in setting demanding standards and insisting upon improvements'. Taking these into account, this research concentrated on the private building sector of the UK construction industry.

4. Where trust is concerned, other countries, such as Japan (Nicholson, 1992 p.350) and the US (Hannah, 1991 p.31; Latham, 1994 p.87), are at different stages of development. This research in accordance with calls for greater trust between clients and contractors within the UK construction industry (Latham, 1994 p.87; Egan, 1998 *para.*17.5) has focused purely on the domestic market.

5. According to Leading Edge Consultancy (1994 p.23), 90 percent of all construction firms may be considered small. Larger firms of over 100 employees account for over 50 percent of the industry's output, representing only about 1.5 percent of construction firms in the UK. Thus a substantial amount of work is concentrated in the hands of a few large contractors. For this reason research concentrated on large private sector clients within the UK construction industry.

This research not only provides opportunities for innovative new competitive strategies (Yates, 1994 p.58; Pries and Janszen, 1995 p.43; Thompson, 1997 p.64), it contributes toward the important investigation into trust within the construction industry. It also provides a foundation of knowledge on which other researchers can build and guidance as to critical issues to be addressed by contractors if client trust in them is to improve.

1.2 Research Aims

Based on reliable research into trust and behavioural intention (Chapters 3 and 4), and focusing on the large private building sector of the UK construction industry from the client decision-maker's perspective, this research sets out to achieve the following:

1. Understand behavioural *conditions of trust* expected by the client from a contractor throughout the life of a project.
2. Understand behavioural intention toward trusting that contractor in future projects taking into consideration the effect of;
   - (i) the client decision-maker's past experience of a contractor's behaviour,
   - (ii) the client decision-maker's own attitudes and beliefs about the likely outcomes of trusting the contractor in future,
   - (iii) the influence on CDM's of normative expectations from key referents (such as architects).

1.3 Key Research Questions

Q1 What are the key *conditions of trust* a client expects from their contractor?

Q2 To what extent does a client's willingness to trust a contractor relate to:
a client's past experience of that contractor?
a client's beliefs about the outcome of trusting the same contractor in future?
a client's overall attitude toward trusting a contractor?

Q3 To what extent does key third party influence affect overall client trust in contractors?

1.4 Main Research Hypotheses

As outlined in Chapter 5, research hypotheses were formulated in keeping with the above aims and research questions and worded in accordance with the prescribed needs of the selected research models introduced below, and the statistical tests used in their analysis. The main research hypotheses are therefore:

H_1 There is a linear relationship between a client decision-maker's Behavioural Intention (BI) to trust a familiar contractor and actual trust Behaviour (B).

H_2 There is a linear relationship between sum of all Attitude items ($\sum$Aact) toward trusting a familiar contractor and the client decision-maker's Behavioural Intention (BI) to trust them.

H_3 There is a linear relationship between the sum of all Consequential Beliefs of trusting a familiar contractor ($\sum$b.e) and sum of all the client decision-maker's Attitude items ($\sum$Aact) toward trusting a familiar contractor.

H_4 There is linear relationship between the Subjective Normative Attitude (SN) toward trusting a familiar contractor and the client decision-maker's own Behavioural Intention (BI) toward trusting a familiar contractor.

H_5 There is a linear relationship between the sum of all Normative Referents ($\sum$nb.mc) on trusting a familiar contractor and the client decision-maker's Subjective Normative Attitude (SN) toward trusting a familiar contractor.

H_6 There is a linear relationship between a client decision-maker's own Past Experience (PE) of a contractor's behaviour and their Behavioural Intention (BI) to trust them.

H_7 There is a linear relationship between the sum of the ten Conditions of Trust ($\sum$CTI) and the client decision-maker's Past Experience (PE) of the contractor's behaviour.

1.5 Brief Method Statement

Having sifted the literature on methods used in the research of trust (See below and Chapters 4), it was decided that two models were needed to cover the complex set of circumstances surrounding client decision-makers' trust behaviour toward contractors. They were Ajzen and Fishbein's (1980) Reasoned Action Model and Butler's (1991) Conditions of Trust Inventory. The output of these two models when combined would also cover most of Ali's (1994 p.119) factors for understanding client confidence (Chapter 4). Not previously used within the UK construction environment they had been

successfully used independently of one another in marketing studies outside of construction.

Prescribed execution of these models required both qualitative depth interviews followed by a quantitative questionnaire survey. Depth interviews were used to elicit necessary items, examples and language, to help prepare the questionnaire contextually for the focus of this research study. The questionnaire was designed and carefully piloted (Section 5.4) before being administered as a postal survey to 590 managing directors of large leading private sector client companies, with a cover letter asking them to forward the questionnaire on to the manager most responsible for deciding on issues related to new and refurbishment building work for the company as a whole. A follow up was required which resulted in a very reasonable response rate for industrial postal surveys (Jobber and O'Reilly 1996) of 21 per cent or 124 useable questionnaires (Section 5.5).

1.6 Chapter Breakdown

Chapter Two: starts by defining marketing, before examining changes arising in the form of industrial and relationship marketing principles. It examines how these principles might help relationship strategies between clients and contractors in the private building sector of the UK construction industry. An industry for which, traditional marketing principles have previously failed. The stages through which construction projects develop and the affect of the Temporary Multi-organisation are considered. In the process, a critique of the literature is given. The chapter ends by focusing on the importance of trust if new marketing strategies are going to work.

Chapter Three: With trust having been identified as of central importance to this thesis, this chapter concentrates on the trust literature. Different types of trust, and the problems specific to construction which hinder its development, are examined. A link is

demonstrated between trust and confidence, and a risk-confidence continuum is presented explaining that risk and trust exist together, and that what is needed are strategies that help to move the client perspective away from risk-based trust and towards confidence-based trust. Ali's (1994 p.119) factors for understanding buyer confidence of professional services are presented as crucial constructs needed to help understand client trust toward contractors. The literature is also examined to find appropriate frameworks or models, to enable research to address Ali's (1994 p.119) confidence criteria. Trust in contractors is defined.

Chapter Four: Having sifted the literature on methods used in the research of trust, a limited amount of work on trust in the construction industry has been revealed. A search was therefore made for models and frameworks used in other disciplines such as marketing, business management and social psychology. Two models are identified which, when combined, are capable of addressing the complex nature of trust in the client-contractor relationship whilst also covering all of Ali's (1994 p.119) factors for understanding client confidence. The models are Ajzen and Fishbein's (1980 p.100) 'Reasoned Action Model' and Butler's (1991 p.648) 'Conditions of Trust Inventory'. This chapter examines the chosen models. It looks at their component parts and how they will be applied. The chapter shows how the two models were combined into a single Modified Reasoned Action Model.

Chapter Five: Reflecting on the aims, research questions and hypotheses listed above, this chapter then sets out a series of null-hypotheses to be tested by the two chosen models. The primary fieldwork is described showing the strict systematic way in which depth interviews and subsequent questionnaire survey were designed and executed according to the carefully prescribed needs of the two chosen models. This chapter also

sets out the assumptions derived from the literature on how the quantitative findings will be interpreted for the purpose of hypotheses testing.

Chapter Six: This chapter presents analysis and results from the quantitative data captured in the survey. Using statistical methods prescribed by the literature the results are presented through a stage-by-stage model building process, culminating in the results for the Modified Reasoned Action Model.

Chapter Seven: Relates the findings to a series of Null Hypotheses, which are then accepted or rejected based on the assumptions for interpretation reported in chapter five. One by one, a statement is made of what each finding means and how this complements, contradicts or contributes to the existing literature and some of the original qualitative findings. At each stage consideration is given to the implications for construction marketing theory and practice.

Chapter Eight: In this final chapter, a summary of findings for each of the original research questions is presented. A statement of contribution to both knowledge and method is made. Implications for construction marketing and management are summarised from the previous chapter. A Critique of the research aims, methodology and analysis is given along with limitations of the research and recommendations for future research.

CHAPTER TWO

Relationship Marketing & The UK Construction Industry: a Background Review of Literature.

2.0 Introduction

The complex exchange process between clients and other parties to a building project is highly interactive and exists over an extended period of time. Once a building is completed the team disbands with the contributing parties going on to other disparate projects. This behaviour within the construction project team, was referred to by Cherns and Bryant (1984 p.181) as the 'Temporary Multi-organisation'. This was a seminal piece of work from a construction marketing and client management perspective, although today we might use the term 'virtual organisation' or 'network'. In this context, it is argued that relationship marketing may suit the construction industry better than traditional marketing practices. This chapter:

1. *Having defined marketing, reports on changes occurring in the way it is strategically managed with regard to the development of relationship marketing.*
2. *It then examines why previously, marketing has not worked well in construction, before examining the implications of Relationship Marketing literature for client-contractor relationships within the building sector of the UK construction industry.*
3. *Throughout it also sets out to gain insights into the nature of the decision making process experienced by clients when deciding which contractors to short list for tender and/or award contracts to.*
4. *The chapter draws upon the 'Model of Cyclical Market Behaviour' (Thompson, 1996a), in which the contribution of advocate behaviour and past client business relationships are expressly related to a contractor's chances of being both short listed for tender and possibly awarded new contracts on an on-going basis. Using*

Industrial Marketing and Purchasing (IMP) literature, focus is on networks and networking tied in with the organisational structures commonly found in construction, namely the Temporary Multi-organisation (TMO).

5. *An appropriate definition of relationship marketing for contractors is proposed, based on the premise that once parties to a project disband they can act as both positive and negative advocates for a contractor for future projects. This suggests the existence of a virtual network which contractors should consider utilising.*
6. *At the same time the more recent development of Project and Strategic Partnering found in construction is taken into account as being the primary tool for managing repeat business relationships directly from past and existing clients.*
7. *The chapter finishes by identifying Trust as of central importance within the client-contractors relationship, if the objectives of relationship marketing (as defined in this chapter) are to be realised for the contractor.*

2.1 What is Marketing?

Smyth (2000 p.25) tells us, 'a common definition of marketing has yet to be found'. However, in referring to Levitt (1983 p.5 & 11), he suggests one definition, considering it to be open-ended and suitably loose as;

> *'..the purpose of a business is to create and keep a customer'.*

Smyth (2000 p.25) goes on to state, this should involve:

> *'...offering a different service in order to meet the particular needs of their clients to avoid head-on competition as much as possible, generating differences in the first step, and this should start with the concept of marketing itself'.*

Bell (1981 p.7) was more specific and taking a more commercial view, defined the essence of marketing as;

> *'...finding out what customers want and then setting out to meet their needs, provided that it can be done at a profit*

As with Smyth (2000 p.25 above) this highlights more strongly the importance of customer (client) needs and wants, and striving to fulfil them. However, Fisher (1989 p.6) is more subtle, stating that marketing;

> *'...is about client care. It is about giving clients what they really want rather than what is thought or assumed they want, or what is considered best for them'.*

This introduces an air of caution on assumptions that either the client of supplier are clear on their wants and needs and that care must be taken to ensure that the best interests of the customer are addressed. This is a view supported by Blois (2000 p.12) as a precursor to his definition of marketing (p.17) as;

> *'The exchange process that occurs between individuals; between organization and individuals; or between organizations as they seek to satisfy their needs and wants'*

Whilst these definitions appear diverse, all proposing different agendas, upon reflection there is a great deal of overlap. Pulling them together shows that marketing, whilst not straightforward, is a complex business with many facets. A single binding definition for an organisation or individual practising marketing might therefore be;

> *To develop and maintain on-going mutually beneficial exchanges, on a basis of sustainable competitive advantage, which satisfies each respective party's, interests, needs and wants, fairly and amicably.*

This of course can be done with a view to making profit, if so motivated. However, this factor has been deliberately replaced with the terms 'fairly and amicably' where an organisation's or individual's purpose falls outside the purely economic profit motive (such as charities, non-profit, voluntary or government organisations).

However, in practical terms, for an organisation to achieve this is easier said than done.

Blois (2000 p.18) goes on to talk about 'marketing management' defining this as;

> *'The function that, by assessing customer needs and initiating research and development to meet them, has a major role in determining the form that an organisation's goods and services should take to secure optimal acceptance by customers'.*

What this highlights is the essential need to take time, and to first understand your customer, their needs and wants, before developing appropriate goods and services in a form that is appealing to them. It is a philosophy that is reflected in what Brassington and Pettitt (1997 p.5) describe as 'two popular and widely accepted definitions of marketing' by the UK's Chartered Institute of Marketing (CIM) and the American Marketing Association (AMA).

'Marketing is the management process, which identifies, anticipates and supplies customer requirements efficiently and profitably' (CIM)

'Marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchange and satisfy individual and organizational objectives'. (AMA)

However, determining the best approach to managing marketing is an area that has courted much debate and research from practitioners and academics alike over many years. Whilst its core philosophy remains the same its eclectic nature of drawing tools, principles and practices from many different disciplines means that marketing and its management never stands still and is continually in a state of evolution. However, whilst for the most part this has been a slow process, in the 1990's ideas about how to research and practice marketing management witnessed huge change on a scale not seen in 40 years. Referred to by Grönroos (1991 p.8 & 1994 p.4) as the development of 'Relationship Marketing', it was thought of as a new paradigm in marketing. Grönroos (1994 p.14) states how, 'Most certainly relationship marketing will develop into such a new approach to managing marketing problems, to organising the firm for marketing and to other areas as well'. This change has opened up new possibilities to the construction industry, which over many years has faced difficulty in developing effective marketing strategies. The next section examines those possibilities.

2.2 Relationship Marketing: A New Marketing Paradigm

The traditional approach to marketing management utilised the 'Marketing Mix'. This comprises of four key areas on which marketing practitioners focus their attentions. They are a company's:

Products (Portfolio, positioning, service augmentation and specifications etc.)
Pricing (Terms of payment, perceived value for money, competitiveness etc.)
Place (Locations, distribution channels, logistic management, delivery etc.)
Promotion (Sales, advertising, public relations, branding etc.)

It is through the manipulation of these variables that businesses continually attempt to gain competitive advantage and win market share. It is rather like mixing ingredients for a cake: a different ingredient mix results in a slightly different cake. The objective, being to achieve a *transaction* or *exchange* between customers and the company responsible, instead of competitors as defined earlier (Section 2.1). However, this has resulted in marketing personnel concentrating on hitting sales targets, through a series of gimmicks designed to gain short-term market share. Once sales and market share start to decline the marketing effort is simply directed at boosting sales from somewhere else with a slightly different mix of ingredients in order to maintain or improve market share. Furthermore, much of the marketing literature until recently centred around consumer markets with tools developed only really suited to a consumer market environment.

The problem has been that little consideration was given to how continuous changes in the marketing mix impact on customers' perceptions of a company and its products or services. Also, it is a costly exercise of continuously reinventing the wheel, always trying to get new customers and by default forgetting the old. Thirdly, practitioners and academics alike have to a certain extent been guilty of focusing on the tools that have developed from consumer orientated markets, losing sight of the underlying purpose of marketing, being to satisfy customers needs and work towards 'creating and keeping

customers' (Levitt, 1983 p.5). Fourthly, by simply focusing on consumer orientated tools, there has been a failure to recognise that different markets in different industries behave in different ways.

However, Grönroos (1991 p.7 & 1994 p.4) in referring to others work (Grönroos, 1990; Jackson, 1985; Rosenberg & Czepiel, 1984; Hakansson, 1982), highlights how perceptions on the fundamentals of marketing are changing (1994 p.4), with the marketing mix that has dominated marketing thought, research and practice for 40 years losing its position. New ideas about customer retention and customer relationship economics were coming to light. Grönroos (1994 p.4) states, 'a paradigm shift is clearly underway'. Grönroos (1991 p.9) also says, the 'Transaction Marketing focus is on making one transaction or exchange at a time, and marketing thus revolves around creating single transactions and facilitating exchanges and not around building long term relationships'. Thompson (1996a p.79) compares these two paradigms whilst utilising Grönroos's (1990 p.146; 1991 p.9; 1994 p.11) marketing strategy continuum (Figure 2.1 over the page).

2.2.1 Marketing Paradigms and Construction Marketing Practice

Applied to the building sector in order to illustrate some of the difficulties marketing has experienced within construction and how the shift in paradigm might better suit this sector of the construction industry. The move toward the new paradigm of relationship marketing is argued as representing a shift toward developing a long-term relationship view of marketing. The table illustrates how certain tools and practices, which work in one type of market, are inappropriate within another. It shows transaction marketing to fit best with consumer packaged goods. Where transaction tools and principles are applied to building, problems have resulted for contractors over the past 30 years.

Table 2.1: The Marketing Strategy Continuum: Implications for Building

The Strategy Continuum:	Transaction Mkt'g Paradigm.	Relationship Mkt'g Paradigm.
Time Perspective:	Short-term focus (i.e. current single project)	Long-term focus (i.e. longevity in the life of a project while also considering both current and future projects)
Price Elasticity:	Price sensitive (i.e. lowest price wins)	Less price sensitive (i.e. best value for money wins)
Dominating Quality Dimension:	Quality of output (technical dimension) is dominating. (i.e. achieving design specification)	Quality of interaction (function-al dimension) more important. (e.g. communication, reciprocation and trust etc.).
Measurement of Customer Satisfaction:	Monitoring market share (indirect approach) (i.e. number and value of contracts won, with its implied client satisfaction).	Managing the customer (direct approach) (e.g. genuine client perceptions and feelings and likelihood of winning future contracts).
Customer Information System:	Ad-hoc customer satisfaction surveys (e.g. post-commissioning one year review if anything at all).	Real-time customer feedback system (complaints processing, problem solving systems, continuous improvement etc.).
Inter-dependency Between Marketing, Operations and Personnel:	Interface of no or limited strategic importance. (i.e. definite lack of liaison, Turner 1990).	Interface of substantial strategic importance. (e.g. partnering, communication and disclosure etc.).
The Role of Internal Marketing:	Internal marketing perceived to be of no or limited importance (e.g. lack of liaison, legal departments over dependence on litigation rather than negotiation and little black books).	Internal marketing perceived to be of substantial strategic importance to success (e.g. non-client contact staffs orientation toward market, retention of high calibre employees, genuine creation and implementation of a client service culture).

Product Continuum:	Consumer packaged Goods	Consumer Durables	Industrial Goods	Industrial Services (Such as Construction).

(Source: Adapted from Grönroos 1990 p.146, 1991 p.9 and 1994 p.11 *in* Thompson 1996 p.79)

The *marketing mix* made of the four P's (place, product, price and promotion) has until recently been prescribed as the essence of good marketing practice. However, 'this has always been a dubious approach in construction' (Smyth and Thompson, 1997 p.5; Smyth, 2000 p.9 & p.188). 'Place is determined by the project's location, with the primary marketing decision of contractors being the spread of regional and international offices'. 'The product is designed by the architect over which the contractor has little control', except for instance with D&B forms of procurement. 'Many contractors are prepared to turn a hand to anything and therefore the service they provide is not

differentiated in any way'. Lowest price therefore remains as the main means of securing work, once a company has pre-qualified. Promotion concerns itself with promoting the company's corporate image and its reputation through its track record. It also concerns selling, which for most companies mistakenly remains the essence of what is labelled 'business development' and 'marketing'.

The net result is that marketing in construction relies upon only a few limited tools such as corporate entertainment, promotional literature, pre-qualification presentations or post-tender negotiating sales pitches. Once the contract is awarded what is simply a sales and negotiating team go on to try and win other contracts elsewhere, and frequently during the contract the original site team were taken off in favour of another project, so the existing client is left with a different 'site team'. Also, due to a focus on winning contracts, once the project is over little care is given to client satisfaction during the contract and after commissioning and handing over of the finished building. This occurs primarily because the marketing mix is taught and practised in a manner, which is indicative of the short-term transaction paradigm.

This is not the first time criticism has been levelled toward the basic 4P's Marketing Mix. Håkansson et al (1976 p.319), in examining industrial marketing, argued that whilst the marketing mix 'approach seems appropriate in situations where the firm has many customers who can be treated in a standardised way', where the selling firm, 'has a limited number of big customers who are in consequence very important and must be handled individually', relationships are much more 'complex, involving several departments, and decision-maker's on both sides in order to solve technical, commercial and delivery problems'. 'In these situations it is altogether meaningless'. This represents

an argument that cannot be ignored in the construction industry context given the very nature of lumpy demand experienced for large, complex, bespoke, building projects.

Jobber (1995 p.21) highlights the work of Booms and Bitner (1981) arguing that the 4P's 'oversimplifies the reality of marketing management'. They then go on to argue for the development of a 7P's framework for services marketing, which adds 'People', 'Process' and 'Physical Evidence' to the existing 4P's. Rafiq and Ahmad (1992) extend this criticism to industrial marketing, stressing that success cannot be realised through manipulation of the marketing mix alone, but through relationship building whereby bonds are developed between buyers and sellers intended to be so strong as to create barriers to entry for competitors vying for business from a company's current customers.

However, the additional 3P's mentioned above certainly possess some merits which could be brought to bear on marketing efforts within the construction industry:

People: Where service is concerned, quality in its delivery is strongly influenced by the employees within the providers' firms. 'Because of the simultaneity of production and consumption in services, a firms personnel occupy a key position in influencing customer perceptions of product (service) quality' (Rafiq and Ahmed 1992 p.439). It is therefore, 'an important marketing task to set standards to improve the quality of service provided by employees and monitor their performance. Without training and control, employees tend to be variable in their performance leading to variable service quality. Training is crucial so that employees understand the appropriate forms of behaviour' (Jobber 1995 p.679-80).

Physical Evidence (or Proactive Personalised Service - See Below): 'this relates to the environment in which the service is delivered and any tangible goods that facilitate the performance and communication. Customers look for clues to the likely quality of a service by inspecting the tangible evidence' (Jobber 1995 p. 680). In construction this may well relate to a range of issues as diverse as the quality of finish on previous projects, protection of materials and maintenance of machinery and health & safety standards on sites. It could relate to the appearance of employees. How well dressed sales and negotiating staff are, site management, sub-contractors and even trades people working on site or participating in site meetings.

Process: 'the procedures, mechanisms and flow of activities by which a service is acquired. Process decisions radically effect how a service is delivered to customers' Jobber 1995 p.680). Jobber (p.680-81) goes on to highlight the work of Berry (1987)

who suggest seven guidelines surrounding success in process management in services marketing:

1. Ensure *marketing* happens at all levels from directors through departments down to the service provider
2. Introduce *flexibility*, customising service to the needs of different customers
2. Recruit *high quality staff* treat them well and communicate clearly to them. They deliver the service.
4. Attempt to market to *existing clients*
5. Set-up a *quick response facility* to customer problems and complaints
6. Employ *new technology* to provide better communication and service at lower cost
7. Use branding to clearly differentiate service offerings from competition in the minds of customers.

Preece and Tarawneh (1996) also emphasised the importance of achieving service quality for client satisfaction specifically within the construction industry. Highlighting how client expectations play a defining role in whether they are later satisfied with a service or not, they clearly state how;

- Competitive information
- Word of mouth
- Personal needs of the customer
- Past experience with the service provider
- External communications from the service provider (e.g. advertising)

All contribute toward the shaping of client expectations. Jobber (1995 p.668) highlights the work of Parasuraman et al (1985) who identify 10 criteria customers use when evaluating the outcome and experience of a service encounter which companies should be aware of if they are to be sure of meeting customer expectations:

1. Access (convenient, available, little waiting)
2. Reliability (consistent & dependable)
3. Credibility (customer trusts company & staff)
4. Security (can service be used without risk)
5. Understanding the customers (does provide understand customer expectations?)
6. Responsiveness (how quickly to customer problems, requests, questions?)
7. Courtesy (do staff act in a friendly and polite manner)
8. Competence (do service staff have the required skills and knowledge)
9. Communication (is service described clearly and accurately)
10. Tangibles (how well managed is the tangible evidence, such as, staff appearance, layout ?)

Christopher and Ballantyne's (1991 p.13), concept of relationship marketing, includes within it an expanded marketing mix. It also has seven elements, identical as above except 'Physical Evidence' is replaced with 'Customer Service'. Later referred to as 'Proactive Personalised Service' (Peck et al 1999 p.411), this is essentially the same as 'Physical Evidence' in that it relates to tangible and intangible attributes of service offerings (Christopher and Ballantyne 1991 p.12-13).

Arguably these activities are not included within the limited narrow framework of the 4P's. Whilst the 4P's alone cannot provide satisfactory coverage of all the issues required in managing marketing in the construction industry context, the case has been made for including them within any relationship marketing efforts of an organisation. However the 7P's should not be focused on, to the point of excluding many other complex issues related to relationship marketing and management in complex industrial situations. Ford et al (1998 p.166-168) in drawing comparisons from across a spectrum of different types of marketing relationships ranging from the purely 'Transactional', through 'Facilitative' and on to 'Integrative' relationships, still stand by the view that managing marketing through a marketing mix paradigm only truly works for standardised transactionally orientated situations. In other types of relationship, something this chapter will go on to examine, other factors come into play.

Table 2.1 above illustrates how the construction industry would benefit greatly from approaching marketing at the opposite end of the continuum, utilising practices appropriate to the Relationship Marketing paradigm rather than Transaction Marketing paradigm.

2.2.2 Different Types of Relationship Involvement

Lambe and Spekman (1997 p.6) developed a spectrum of relationships, which showed degrees of involvement in relationships between National Account Managers (NAM) and buyer organisations (Table 2.2 over the page). This shows how, marketing management priorities change, depending on how closely organisations work with one another.

Table 2.2: Spectrum of NAM Relationships.	Repeated Transactions	Long-term Relationships	NAM Alliances
Level of "Collaboration"	Low	Moderate	High
Emphasis on Selling	High	Moderate	Low
Concern With Price	High	Moderate	Low
Switching Costs	Low	High	Inordinate
Product	Commodity	Complex	Joint Development (Buyer and Seller)

What becomes clear here is that within the construction industry practice fails to effectively address these characteristics. For instance, building projects are complex, and levels of collaboration leading to success ideally need to be high. There is pressure on pricing to be low. This suggests that a long-term relationship/alliance approach to marketing strategy should be pursued, thus reinforcing the idea highlighted in table 2.1. However, clearly this has not been the case. Prices are low due to pressures caused by high levels of competition and little differentiation between contractor service offerings, thus taking on a commodity approach to the service product. At the same time client expectations and marketing efforts narrowly concentrate on being awarded single project contracts rather than longer-term client-contractor working relationships where the contractor may be responsible for a schedule of works for a fixed extended period of time. This strongly resembles a weak transaction paradigm approach to marketing management mentioned above (Grönroos 1991 p.9) and represents many reasons why marketing has not worked well in construction. In fact it could be argued that with

regard to the purpose of marketing management defined earlier (section 2.1) these practices are the antithesis of good marketing management.

However, in attempting to manage effective marketing strategies from the relationship marketing paradigm in construction it is essential to understand some of the problems currently faced that hinder progress. One key area is in the complexity of the exchange process experienced between clients and service providers in the industry. The exchange process between clients and other key parties to a building project is highly interactive and exists over an extended period of time. The process is complex because, as Cherns and Bryant (1984 p.181) state, it involves;

'...the engagement of parts of several separate and diverse organisations - client, consultant, contractor etc. - for the limited and finite purpose of bringing a building into being from inception to completion. The business of managing the whole process is the function of a special kind of organisation that is set up for this purpose. It may be called a "project team". It is in fact, a multi-organisation since its membership is drawn from representatives of many different organisations'.

Cherns and Bryant (1984 p.181) call this the 'Temporary Multi-organisation' (TMO) and for over forty years the construction industry has developed norms and procedures to help this process. However, this process has become somewhat 'institutionalised' (Ford 1978 *in* Ford 1982 p.17), creating a situation where parties responsible for a project have become project rather than client focused. Wrapped up in organising and watching participants' contractual and functional responsibilities, they have lost sight of the client, undermining the purpose of this approach. The term 'Project Based Temporary Networks' (Thompson, 1996b) has been used to describe this behaviour.

At this stage it should be made clear that in construction the exchange that takes place when a client wishes to procure a building is not immediate. Developing a building is not an immediate exercise and therefore the exchange process can only be done through an extended period of transaction. This in part contradicts theory surrounding the

dichotomy between transaction and relationship marketing paradigms. But it also reinforces the argument that relationship marketing fits the situation between parties to a project better than traditional marketing mix practices.

Grönroos (1991 p.8) asserts that the relationship approach to marketing, is both an alternative and complement to the marketing mix approach, which 'owing to its de facto focus on single exchanges or transactions is not considered fully applicable to situations where the development of long-term relationships are called for'. Cociello et al (1998 p.184) support this view, stating, 'Successful organisations must learn to marry the two concepts (transaction and relationship marketing) in a way that profitably delivers what the customer demands and no more'. Therefore, these points off-set the idea that long term relationships managed through relationship marketing cannot exist within the period of a single transaction that takes place over an extended period of time. After all, there are many industries and markets like construction, where the single exchange or transaction must take place during a period of long-term interactive relationship (ship building, aerospace, television and film, publishing etc.).

According to the RSA report on *'Tomorrow's Company'* (1995 p.5) a number of key factors are emerging in the business environment. The increasingly rapid changes in technological developments, globalisation, new employment patterns and organisational structures are creating greater pressure on organisations to adapt to change in the environment faster than ever before. 'Intensified competition, driving the need for speed and innovation, makes teamwork - including work by cross-functional project teams even more important in tomorrow's company' (p.17). The dichotomy between competition and co-operation needs to be harmonised, and organisations must be quicker at adapting to change when needed. Miles and Snow (1986 p.64) refer to 'Dynamic

Networks' and 'Vertical Disaggregation'. 'Business functions such as product design and development, manufacturing, marketing and distribution, typically conducted within a single organisation, are performed by independent organisations within a network. Networks which may be more or less complex and dynamic depending on competitive circumstances'.

Many terms have appeared and are used to describe these new generation organisations. They include 'Federative Organisations' (Handy, 1990 p.117), 'The Spider-web Organisation (Quinn, 1992 p.120) or 'Starburst Organisation' (Quinn, 1992 p.148). 'The Team-based Organisation (Tjosvold, 1993 p.12), 'The Cluster Organisation' (Mills, 1993 p.132), 'The Virtual Corporation' (Davidow and Malone, 1992 p.9) or 'Virtual Organisations (Goldman et al, 1995 p.201, Preiss et al, 1996 p.158). Developing an understanding of how relationship marketing can be developed in the construction industry might also go some way to understanding how relationships in many other sectors can be better managed.

Grönroos (1991 p.8) states, 'according to the relationship paradigm, marketing is considered as revolving around the development of long-term relationships. It is, for example, defined as follows;

Marketing is to establish, maintain and enhance relationships with customers and other parties at a profit so that the objectives of the parties involved are met. This is done by mutual exchange and fulfilment of promises'.

There is a danger that as the relationship marketing paradigm grows, and more research is done, greater emphasis is concentrated on consumer markets. Where this is so, the core of relationship marketing theory will be based on the idea of developing repeat business from existing clients. The possibility remains in construction that where clients do not wish to be involved in this type of relationship, it could do more harm than good

to pursue such a strategy. However, if long-term relationships can and must exist within a single period of transaction, then care must be taken to ensure that developing Relationship Marketing theory does fully acknowledge this. Otherwise these relationships will continue to be managed poorly thus undermining the possibility of on-going business through additional projects later on. Failure to consider contextual factors can limit the applicability of the ideas. Hogg et al (1993 p.505) state, with regard to Relationship Marketing, that '...the possibility exists of arriving at a highly stylised view of a relationship which would be of very limited use for organisations practising Relationship Marketing. This might prove largely sterile in its application for marketing purposes which would thus have a very short shelf life'. For some it has become evident that the profusion of practises and ideas developing under the guise of relationship marketing means there is a danger of falling into these types of trap. Hogg et al (1993 p.506) observe that, 'Relationship Marketing is potentially one of the most powerful ideas in current marketing thought, it is important to ensure that the concept is carefully and rigorously examined'.

It is generally agreed that marketing derives itself from disparate disciplines (social psychology, social anthropology, sociology, economics, business policy, management science and organisational behaviour etc.). However, there have been cases where writers' and academics' enthusiasm for the new, has resulted in poorly thought through adoption of ideas, which end up difficult to actually practise within a marketing context and philosophy. Michael Porter's work on Competitive Strategy and Competitive Advantage is a case in point (Speed, 1989 p.8; Sharp, 1991 p.4). The construction industry (for which historically marketing has not worked particularly well) offers a good

testing ground for helping to develop Relationship Marketing principles, both in terms of its conceptualisation and implementation for three reasons:

1. The nature of the service being sold.
2. Clients decision making processes.
3. The nature of the competitive environment.

All of which are found to be complex and highly involved, making the management of relationships crucial and, as already argued, the suitability of relationship marketing strategies appropriate. This will also directly address Hogg et al's (1993 p.506) call for concepts to be, '...carefully and rigorously examined' as any weaknesses in the principles are sure to be uncovered quickly.

It has been argued that a fundamental change in paradigm is occurring in which all areas of marketing management are examining the potential for developing long-term buyer-seller relationships. However, Barnes (1994 p.71) tells us, 'Everyone is developing relationships' and continues by saying, 'There is little consensus, however, on what the concept means and even less consistency in how it is practised'. He asks the question, 'What is Relationship Marketing?' Many writers' opinions on Relationship Marketing are based upon their own experience and respective disciplines, and often bear little similarity to findings derived from research under disciplines such as social psychology, and sociology. Barnes (1994 p.71) highlights work by Fisk, Brown and Bitner (1993), who claim to have observed that even research on relationship marketing, and customer retention specifically, has taken on a variety of forms, with several authors taking quite different perspectives on these related concepts. It is entirely likely that the variety of practices in both consumer and industrial marketing arenas, under the guise of relationship marketing, is contributing toward making clear definition difficult. Palmer (1994 p.741), states, 'Critics of relationship marketing argue that the concept is poorly

defined and is merely a new way of describing what businesses have been doing for a long time'. It is certain that relationships are already of central importance in construction. Therefore, this new language to describe marketing makes this discipline more accessible for marketers in construction, while also raising the possibility that something can be learnt from construction to aid understanding and development of relationship marketing theory.

As stated earlier, Grönroos (1991 p.7 & 1994 p.4) refers to others work (Grönroos, 1990; Jackson, 1985; Rosenberg & Czepiel, 1984; Hakansson, 1982) showing that relationships in some markets (like construction) have been of central importance for some time. In line with this, a number of theories and tools have evolved which may help toward developing better marketing strategies in the construction industry. This chapter will go on to examine these alternative principles in more detail in order to see what the best approach to relationship marketing in construction might be. However, it is first important to understand in more detail the problems experienced in the construction industry where attempts to develop marketing management capabilities have already met with difficulties.

2.3 Marketing in the UK Construction Industry: Problems Encountered

Attempts over the past 30 years to introduce marketing into the UK construction industry have met with difficulties. A key reason for this has been identified by Yisa et al (1996 p.48) who state, 'there has been no significant research interest in marketing in the UK construction industry prior to the 1970's'. However, Yisa et al (1996 p.48) go on to say 'within the last two decades there have been various attempts at research in this area'. Researchers are grappling with the question as to 'exactly what constitutes marketing in construction'. The difficulty in this has been attributed to the following factors (p.49):

(i) Characteristics of the industry
(ii) Orientation of the industry
(iii) Education and training

2.3.1 Characteristics of the Industry:

Essentially a service industry (Smyth, 2000 p21; Yisa et al, 1996 p.47; Hardy and Davies, 1983 p5), it has certain unique characteristics, such as, the production processes and methods of production employed. Methods of price determination, i.e. tendering, competitive bidding and actual payment methods are different. The structure of the industry, in terms of the relationships between groups contributing and their interaction within the construction process separates this industry from others. 'The involvement of many organisations in one project provides a strong basis for conflicts during the construction process' (Fisher, 1989, as quoted by Yisa et al, 1996 p.50). It might well be the case that concerns over fighting these conflicts or avoiding them has distracted attention away from what is central to the principle of marketing, which is satisfying client needs and wants, or more simply being 'client-orientated' (Smyth, 2000 p.6).

2.3.2 Orientation of the Industry:

Until relatively recently the industry has been described as, 'a staid and tradition-bound sector due to its relatively stable environment' (Pries and Janszen, 1995 p.43). If so, this suggests norms and procedures have developed over time and have become as Ford (1993 p.14) describes, 'Institutionalised'. If so, processes and behaviour in the industry would be subject to several unquestioned guidelines and restrictions. This appears to be changing and will be discussed later. However, many of the guidelines under which the industry operates may have more to do with the traditions of the industry rather than rational decision-making. This may have stifled creative competitive strategic thinking, which might have a lot to do with many senior managers in the industry being production

rather than marketing orientated. With this, the service providers in the industry are more concerned about production processes and methods, rather than client concerns or motivations for having construction work undertaken in the first place. Contractors and designers are constantly looking for more cost-effective methods of production to improve production standards in terms of time, cost and quality assurance (Yisa et al, 1996 p.50). A production orientation leads contractors and other service providers in the industry to simply work toward specification better than the competition in terms of cost, time and quality. Referred to by Fisher (1989 p.45) as the 'Specification Game', it is argued that there is a 'widely held but slightly arrogant and erroneous belief that if you produce a better product or offer a better service, the world will beat a path to your door. This is a trap that many firms run by brilliant engineers too often fall into'. Whilst important, this appears to have been pursued to the point of excluding why clients would have embarked upon any particular construction project in the first place and ignoring their broader interests (organisational or market growth, greater efficiency, diversification, new market entry etc.). As Smyth (2000 p.193) states, 'where a client is offered a service, it is the nature of that service in which the client is intrinsically interested'. He goes on by saying it is how the client views the nature of the service which gives rise to the idea of perceived value. It is important to understand clearly what the client expects from the services offered because where the client compares on going perceived value during and after a project with expectations set before the project started, this dictates level of client satisfaction later on. For this to be successful the services provider must consider not only matters of cost, time and quality but issues such as whether the outcome or need which sparked the project in the first place has been met or hindered. A change in orientation is needed if marketing is to take off in the construction industry. However, 'A client-orientation requires an attitude shift before it

begins to impact upon behaviour, regardless of the processes and structures that senior management may put in place' (Smyth, 2000 p.18). Clients make-up a market, and failure to understand clients is a failure to understand a market a company or practice is operating in. Fisher, as early as 1989 (p.31), was saying, 'market orientation is the responsibility of every employee of an organisation'. That, 'it is vital senior managers properly instil a market orientation philosophy into their firms, so that at every level of staff, or at every point of contact with a client, a potential client, or someone who might influence a potential client, the right image is being put across'. This issue is a pressing one, which must be addressed. Latham (1994 p.3) has called for a greater client-orientation in the UK construction industry by saying, 'implementation begins with clients. Clients are at the core of the process and their needs must be met by the industry'. More recently, Egan (1998 *para.*17) has emphasised the importance of 'focus on the customer' as one of five key drivers of change needed in the construction industry. However, a barrier to this may be in the way managers within the industry have been educated and trained. Fisher (1989 p.31) highlights this point by saying that for many partners and directors in the construction industry the idea of developing this client/market orientation is perhaps a frightening thought, but indicative of the amount of training and attitude changing still needed in most parts of the construction industry.

2.3.3 Education and Training:

The future of the UK construction industry is heavily dependent upon its ability to develop innovative business and competitive strategies (Thompson, 1997 p.65). 'Innovation creates possibilities of achieving competitive advantage, but only when managed properly' (Pries and Janszen, 1995 p.43). To do this 'Companies in the construction industry will have to compete in a more extrovert and market driven way

and they will have to consider their capabilities'. However, according to Pries and Janszen (1995 p.44) a study in the Netherlands, showed that in construction, approximately 51% of the top management are engineers, while 43% have no qualifications at all. They assert that, 'if management is originating from practice, with emphasis on short-term (project) management and a technical background, this can be defined as an *engineers paradigm* (strictly technical focus on product and process). Evidently this has a major effect on the policy of enterprises'.

Whether there is a similar situation in UK construction would be interesting to find out, although it is not the focus of this thesis to do so. Certainly with current innovation emphasis on new products, processes and services, with cost and price reductions being the motivation (Pries and Janszen, 1995 p.47), it would appear that managers in the UK construction industry rise in a similar way to those in the Netherlands. The result is that senior managers have a sound experience in project focused management, but little organisational, business and strategic acumen. According to Fisher (1989 p.45), whilst commenting on the role of marketing in the construction industry, ' too many senior members of industrial companies and the professions do not yet understand what marketing is, or its importance to a firm's or practice's success'. He goes to say (p.45), 'they do not yet see the need for education and training in these areas'. There is, 'a belief by purist engineers, architects, surveyors or others, that such a marketing approach reduces their professional standing and cheapens the service they are offering'. He argues, 'such statements ignore the commercial pressures of the real world, the increased competitiveness world-wide, and perhaps deliberately exhibits rather a nineteenth-century, ivory-tower mentality where gentlemen don't soil their hands with commercial

matters'. Simply, 'they underestimate the importance marketing has or can have on the success of their firm or practice'.

However, the environment in which construction is operating has changed, forcing these views to become increasingly dated. As with the 'orientation of the industry' noted above recent changes within the construction industry environment are resulting in a slow change of attitudes and ideas. Betts and Wood-Harper (1994 p.551) have said that there is an, '...increasing range of customer-orientated theories (rather than engineering or project focused) emerging within the management discipline which are finding increasing acceptance within other management domains'. However, 'their application in construction appears to be delayed'. They argue that there is a need, '...for a wider adoption of innovative, emerging management theories to construction'.

2.3.4 The Changing Environment and Climate for Construction Marketing

The nature of the client in this industry is changing. Latham (1994 p.3) tells us, 'Previously, government acted as a monolithic client. That is not so now'. Latham (1994 p.7) also says, 'the public sector is a less dominant client than it used to be. Some previously extensive programmes such as local authority house building have been greatly reduced. Other work is now partly funded by private investment, or has been totally privatised'. According to the National Joint Consultative Committee one consequence is that, 'nowadays the NJCC has no means of ensuring that all housing associations, trust hospitals, grant maintained schools, private government agencies and utilities companies are aware of the best current practice and changes in the construction industry' (NJCC *in* Latham 1994 p.3). Improved communication is needed if the construction industry is to recover. 'For the governments' part they need to obtain good value for money but also, assist the productivity and competitiveness of the UK

construction industry' (p.4). However, leading private clients also have a substantial role to play in setting demanding standards and insisting upon implementation of best practice. They also have most to gain (Latham, 1994 p.4). There is awareness that relationships between parties within the construction industry must improve. 'In this increasingly dynamic situation, it is clear that construction enterprises will have to be vigilant and forward looking to survive, let alone to do well. Tactical considerations will need to be replaced by, or at least put in the context of strategic ones' (Betts and Ofori, 1992 p.511). 'Innovation creates possibilities of achieving competitive advantage, but only when managed properly' (Pries and Janszen, 1995 p.43). To accomplish this, 'Companies in the construction industry will have to compete in a more extrovert and market driven way and they will have to consider their capabilities'. These arguments suggest the UK construction industry is under increasing pressure to develop more innovative business and competitive strategies.

Betts and Wood-Harper (1994 p.552) argue that, 'construction management research is in need of an urgent stimulus of new thinking to prevent it from settling into a stale pattern of parochial observations which are as yet unguided by any substantial theories'. They argue, for new customer-orientated theories to be, 'seriously considered in construction and to be related to the existing body of construction management theory'. Instead of the industry relying on its own discipline for sources of inspiration (Betts and Lansley, 1993 p.221), Betts and Wood-Harper (1994 p.552) argue that, '...innovative theoretical approaches originating from *outside* of our discipline ought increasingly to inform our research in construction management. A view supported by Egan (1998), this is an increasingly pressing issue.

Yates (1994 p.58) in examining US Engineering and Construction found that, 'during the past two decades the global market place has changed. Engineering and construction firms have had to deal with many new competitors. This has created a need for understanding global dynamics and competition, developing new and innovative competitive strategies and taking actions to maintain world class leadership'. In the UK, increasingly dynamic domestic competition both internally and from abroad, is increasing the pressure to change from what has been a relatively protected industry to one, which is more commercially aware. Lynn (1996 p.29) quotes Egan as saying, 'The trouble with many of the British contractors is that they are not competitive'. She goes on to report that BAA who set up a 'world benchmarking team' which compared prices in the UK with the rest of the world. This often revealed dramatic differences in efficiency, including an across the board finding that most things were 55% percent cheaper in the USA (Lynn 1996 p.29). Lynn (p.32) concludes that, 'companies need to be much larger in order to compete for contracts and to manage the consequent risk'. This is not good for British contractors when companies like Trafalgar House (reported as being Britain's largest contractor) were lost to British ownership when bought out by Norway's Kvaerner (Siehler, 1999). Recently, Hailstone (2002 p.6) has reported fears by Professor Martin Betts at Salford University that, 'in a few years time there will be just five or six large global construction companies capable of undertaking major projects around the world - none of these will be UK owned'.

Client demand for building projects can be sporadic, and specification for those buildings far more bespoke compared to products or services in most other industries. Historically, marketing theory and practice have not been well suited to this situation, and have been generally rejected by the industry. However, commenting upon the work of Christopher

et al (1991) and Grönroos (1991), Fellows (1994 p.8) implies that the development of relationships with clients might suit the construction industry better than traditional marketing practices. The introduction of relationship marketing offers the opportunity to develop marketing strategies that are more appropriate to the needs of the UK construction industry, and increasing attention is beginning to be focused on this potential. There is a growing realisation about the need for education and training both in marketing and better strategic management (Smyth, 2000 p.14; Preece & Barnard, 1999 p.20; Preece et al, 1998 p.ix; Pettinger, 1998 p.60; Thompson, 1997 p.64 & 1996a p.78; Stockerl, 1997 p.24; Preece et al, 1996 p.5; Trim, 1996 p.63; Betts and Ofori, 1992 p.512; Pearce, 1992 p.10). The question therefore arises, what can be done?

2.4 Working with the Relationship Marketing Paradigm: A New Era for Construction Marketing

Sheaves and Barnes (1995 p.2-10) reviewed work outlining the fundamentals of relationships from various perspectives (Duck, 1991; Gupta, 1983; Hinde, 1979; McCall, 1970). Most frequently recorded components seen as essential to positive on-going relationships have been:

- Trust
- Patterns (Consistency)
- Reciprocation
- Empathy
- Commitment
- Communication (Disclosure)

However, it is necessary to reduce these varied elements to their essence, being selective about which element(s) can be practically examined within a single research project. Clearly all elements are inter-related, and therefore findings from this particular study will be linked back with the other elements, but the question now becomes, which key element(s) should be examined in this particular project?

Morgan and Hunt (1994 p.20) say, 'though there are no doubt many contextual factors that contribute to the success or failure of specific relationship marketing efforts, we theorise that the presence of relationship commitment and trust is central to successful relationship marketing'. 'Their presence produces outcomes that promote efficiency, productivity and effectiveness. In short, trust and commitment lead directly to co-operative behaviours that are conducive to relationship marketing success'. This is later confirmed in their discussion of results (Morgan and Hunt, 1994 p.31).

Trust: Morgan and Hunt (1994 p.24) argue behavioural intention is a critical facet in the conceptualisation of trust: 'If one believes that a partner (e.g. contractor) is trustworthy without being willing to rely on that partner, trust is limited'. 'Willingness to act is implicit in the conceptualisation of trust'. 'If one is confident then one is willing; if one is not willing, then one is not genuinely confident'. Likewise, within the client-contractor relationship if a client is confident they may be willing to award a contract. Where they are not willing it implies they are not confident. Powell (1990 *in* 1992 p.393) in examining the relationship between conflict and trust in building, supports the link between trust and confidence. He states, 'When I say that I trust my builder, I am saying that I have confidence that tomorrow, whatever the circumstances arise, he will behave well toward me, recognising that we both have a stake in our relationship'. He goes on highlighting, within reason, conflict and trust can exist simultaneously. However, 'any risk or incidence of conflict must be managed in the interest of trust. The worst thing that can happen is that the issue is swept under the carpet. Trust requires that the issue be faced'. Similarly, Buttle (1996 p.9), in examining Morgan and Hunt's (1994) work, highlights, *Trust* is the very cornerstone of relationship commitment; without it commitment flounders. Trust is also viewed as crucial in studies relating to industrial

marketing and purchasing (Lambe and Spekman, 1997 p.66; Ravald and Grönroos, 1996 p.25; Anderson and Narus, 1990 p.53). Therefore, trust may well be the binding factor. Understanding the trust relationship between clients and contractors in the building sector of the UK construction industry is very important. Given the complex nature of the exchange relationship experienced by clients and contractors, then understanding the affect these relationships have on trust so that they can be managed better, thus avoiding conflict and inducing greater confidence, may go someway to maintaining or even raising any trust that exists. Hannah (1991 p.11) examined trust in the US construction industry between client, constructor and architect and suggested that trust is crucial to achieving mutually successful projects. However, confirming this went beyond the scope of her work.

Commitment: This plays an important role and successfully executed it should reinforce client trust in the contractor. Commitment by a contractor to satisfy the client must be maintained throughout the entire life of the project. It is particularly important in many stages of what has been called the relationship life cycle (Ford, 1980 p.343 - 348). Commitment throughout the life of a relationship therefore seems essential, if in return you want to keep capturing the client's business. However, this would also be dependent upon client loyalty and in construction this in itself is problematic.

Loyalty and Retention: If as Levitt (1983 p.5 & 111 – Section 2.1) tells us, 'the purpose of business is to create and keep a customer'. Simply getting a sale is not enough'. It merely consummates a courtship before a relationship truly begins. Future success depends on how well the relationship is managed by the seller (Kotler, 1992 p.1). Levitt (1983 p.5 & 11) is suggesting, repeat business from an existing customer is of central importance in marketing. This principle permeates a lot of the literature on

Relationship Marketing and the idea of forming long-term relationships (Section 2.2). However, it must be accepted that buyer behaviour varies in different types of market. Expecting marketing managers to develop this approach in all circumstances is unrealistic.

There is a danger that if maintaining repeat business directly from the same past and existing clients becomes a key indicator of successful relationship marketing, then the continued development of this paradigm, its tools, the way it is implemented and practised may become constrained by this. That would simply introduce an alternative stylised approach to marketing from that of the marketing mix. Which in turn would restrict its effective development and application to many situations, including construction. This risks the development of Relationship Marketing being rushed and the same mistakes as with the traditional marketing practice being repeated. New opportunities may be hindered before they have even started. Grönroos (1991 p.8) says the establishment of a relationship can be in two parts. One is simply to attract customers and two is to build the relationship with specific customers. In the construction industry this pertains to a contractor's ability to firstly be invited to bid in the tender stage possibly based on a period of courting until actually securing the contract. Secondly, once done, managing the relationship must take into consideration the longevity of the project and the nature of the relationship between client and contractor that will exist once the project is up and running. Consideration might be given to a continued relationship after project completion. However, this does not mean that the contractor must achieve repeat business. Grönroos (1991 p.8) says 'establish, maintain and enhance relationships with customers and other partners'. In construction this can refer to existing clients the contractor is already working for, as well as other parties such as architects, engineers,

surveyors and potential clients in future. He goes on to say, '...so that the objectives of the parties involved are met'. However, he does not express what these objectives need necessarily be, but does state that they need not be 'long-term'. Therefore, in the construction sector it can be argued that repeat business as prescribed by Levitt (1983 p.5 & 111) from existing clients, although rewarding, need not be the only outcome.

This is a very important point for the simple reason that if the objectives of Relationship Marketing remain dependent on repeat business in its definition, then it relies heavily on two key components; 'loyalty' and 'customer retention'. Where this is so, care must be taken, because the ability to achieve repeat business varies considerably in different industries and markets. In consumer marketing (Cunningham, 1956 p.116) and industrial marketing (Wind, 1970 p.450) loyalty is regarded as a statistic summarising the outcomes of a sequence of buying decisions. Where a suitably high number of purchases are made from one source, the buyer is said to be loyal. Retention is seen as preventing customer 'defection' (Carrol and Rose, 1993 p.5) or the 'propensity to leave' (Morgan and Hunt, 1994 p.22). However, all building projects eventually come to an end and therefore, leaving is inevitable. It is true the client may choose to come back later on with one or many inter-related new projects. However, due to the long periods of time often experienced between projects, and clients' inclination to invite competitive bids against a bill of quantities, attempting to implement loyalty and customer retention systems into client-contractor relationships may not always be realistic unless the client has a continual demand for new facilities.

It is proposed that whilst Relationship Marketing can be considered successful due to repeat business from the same clients, it can also be considered successful when objectives defined by the parties involved are achieved to everyone's satisfaction. This

requires that relationships be managed appropriately to a situation and to the requirements of participants, from both a buyers and sellers perspective, rather than enforcing an inappropriate blanket measure of performance for all circumstances.

The relevance of direct repeat business through loyalty is still strong in certain situations in construction. Such as with 'strategic partnering' discussed later. These partnerships represent good tools for managing on-going and repeat business relationships. However, opportunities also exist through new theories developing around network style organisations such as the 'Virtual Corporation' (Davidow and Malone, 1992 p.9 - Section 2.2 above), of which the construction industry's own Temporary Multi-organisations (Cherns and Bryant, 1984 p.181) represent an early example. These also provide opportunity for relationship marketing in the UK construction industry through better utilisation of word-of-mouth and advocacy in referral markets.

2.5 Developing Relationship Marketing for the Construction Industry

Relationships between clients and contractors already exist and manifest themselves in a variety of ways. Therefore, maybe it is possible to develop Relationship Marketing strategies around these, which are more appropriate to client and contractor. Current relationship activities include;

(i) **Partnering:** Improving how various parties work and interact with one another during a project more efficiently and effectively.

(ii) **Strategic Partnering:** Extends the principles of 'Partnering' through a series of inter-related projects for a fixed period (e.g. 5 years). This allows learning and continuous improvement between participants within the remit. The philosophy initially practised in the US with some success, it is now being developed in the UK between companies like Laing Partnership Housing, and local Housing Associations. It is particularly suitable for large clients with an on-going programme of works (e.g. BAA). However, as Ellison and Miller (1995 p.44) highlight, this involves integrated teams and the need for trust and communication. 'Trust relationships between the supplier of services and the client', and, 'Communication designed to facilitate solutions rather than establish positions or find fault'.

(iii) **Advocacy, Referrals and Networking:** Relationships between isolated projects through *courting* and *follow-up* whilst making better use in word-of-mouth and advocates in referral opportunities (Peck et al 1999; Mangold et al 1999).

(iv) **Long Standing Relationships:** There have been cases where straightforward long standing relationships have existed between companies, as was experienced between 'Bovis' and 'Marks & Spencer' for many years, where the opportunity existed for repeat business over a long period of time.

(v) **Private Finance Initiatives (PFI):** Here contractors like 'Amec/Atkins' or 'Equion' competitively bid for contracts on projects where finance is put together between private financiers and the public sector. Often done where construction and management of public-privately run rail and road links, hospitals, schools and other public service facilities are concerned, there is talk of government proposals to revise PFI contract guidelines, as contracts are currently considered to be time consuming, complex and costly to bid for. Whilst outside the immediate focus of this study (section 1.4) those who develop the experience and good reputation for being able to successfully work within these contracts, may well benefit from greater competitive advantage later on (See points i-iv).

(vi) **Alternative Dispute Resolution (ADR):** As an alternative to litigation, this aids resolving disputes in the construction industry. However, Ellison and Miller (1995 p.44) state, 'as the name implies ADR comes into play after disputes have already arisen', and where, 'one critical key to successful projects is establishing relationships among the parties driven to resolve issues before they become disputes' (p.44) they recommend 'Partnering' over ADR. This requires a, 'move away from a traditional adversarial relationship to a synergistic partnership built on trust and long-term goals' (see above).

(vii) **Customer Relationship Management (CRM) and Electronic Customer Relationship Management (*E*-CRM):** Cobb (2002 p.41) quotes Peter Rogers as saying, 'The internet now gives us the opportunity to address many of the industries' problems by sharing best practice, encouraging standardisation, increasing transparency of information and improving procurement, collaboration and logistics.' Cobb (2002 p.38) also quotes Tony Driffield as saying, 'By layering customer requirements, understanding the relationships and what sales issues they have, you can deliver a service.' 'We're not selling bits of metal that go up and down, we are selling value they can add to their businesses. Given the long, complex routes to market through the specification and purchasing chains, CRM and databases are really needed to track progress'. However, once again, trust becomes important if this approach is to develop. Priess et al (1996 p.60), in discussing co-operation in 'Virtual Corporations' which are similar to Cherns and Bryant's (1984 p.118) Temporary Multi-organisation, state, they 'use information technology to dynamically link, people, assets and ideas into an opportunistic network of companies that come together quickly to exploit fast-changing opportunities'. This is similar to what is being prescribed by Peter Rogers above. Priess (1996 p.144) then advises on the need for trust and sharing. 'If the supplier wants to do business with a customer in the future, and vice versa, both are powerfully motivated to set up trustworthy arrangements'. This without a doubt presents great opportunity for the future. But in its early days, clients and contractors still need to improve relationships fundamentally.

Ford's (1982 p.10; 1993 p.7) development of interaction through IMP (Industrial Marketing and Purchasing) can be particularly relevant between client and contractor with regard to how they approach each other, behave toward one another and communicate. If each party's interactive strategy varies conflict may arise. This has to be minimised in order to control time and cost, and avoid the damaging adversarial behaviour that is far too common in the UK construction industry. After all, the construction industry spends more on litigation than it does on training with surveys showing the legal profession seeing the industry as its most promising growth area (Allott, 1991 p.27-28).

Christopher et als' (1991 p.3) idea of Relationship Marketing by pulling together marketing, customer service and quality management also fits this bill. As service is central to the client-contractor relationship and that quality in the end product (i.e. the building) in terms of specifications, price and time are of key importance. By doing these things well, clients are more likely to go away satisfied with the work the contractor has done. Failure to do this will result in adversarial behaviour, and risks developing a poor reputation in the industry. The role of marketing is to ensure satisfied clients go away believing and saying good things about the contractor and then managing new business opportunities through repeat and referral markets. This is a point illustrated by Payne et al's (1991 p.21) *Six Markets Model.* The model suggests that companies have a number of markets for which they need to direct marketing activity and formulate marketing plans. These are markets for existing clients, potential clients, supplier markets, employee markets, referral markets, influencer markets and internal markets. Within each of these, different parties have the ability to decide a contractor's level of future business (Table 2.3 over the page).

Within this, all of the groups have the potential for acting as *advocate* for the contractor, passing on positive or negative word of mouth about their performance to the different client markets. For the contractor the development of future business is therefore dependent upon management ability to improve performance not only in terms of client satisfaction, but through the development of positive advocates and the management of business opportunities derived from referral markets.

Table 2.3: Payne's *Six Markets Model* Applied To Building.

Markets	Parties
Client markets:	Clients for which the contractor is currently working for.
Potential clients:	Those who may consider using that contractor later on, either due to the past experience of the contractor they have or due to positive word of mouth/advocate behaviour from referral and/or influencer sources.
Supplier markets:	Material and labour suppliers, sub-contractors. This does not fit immediately into the client-contractor relationship. However, where collaboration with these markets are improved, the benefits of this can be communicated through the contractors employee markets to all client and influencer markets. This has the potential to improve the relationship that exists between client and contractor
Employees :	People working within the contractor organisation who are suitably motivated and trained.
Referral Markets:	Getting clients to do the marketing for you. Having existing and past clients work as advocates for the contractor to potential new and repeat business clients of the future.
Influencers :	Specifiers such as architects, quantity surveyors, clerks of works, regulatory bodies etc. Again as with supplier markets, these do not fit immediately into the client-contractor relationship, but do influence the decision making process within the client-contractor relationship by acting as advocate to the various client groups.
Internal Markets:	The application of marketing internally within the contractors firms (formalised procedures, cross functional communication and team building, IT systems, complaints handling, and the part-time marketer, etc.).

(Source: Adapted from Payne (1995 p.31) and Thompson (1996 p.84)

However, to achieve this would require a resolution (or realignment) of the competing interests of clients, staff and shareholders, by changing the way managers 'manage' the activities of the business. It would be vitally important that contractors' marketing efforts also focus on client relationships rather than just immediate projects. To help implement appropriate strategies in Relationship Marketing for contractors, it must be understood that some clients can go through a cyclical process. In this they start as a new client to the contractor, they experience the contractor's services and then after the project may or may not look for the contractor's services again in the repeat business market. In either

case they can also act as an advocate for the contractor. This can work well in a contractor's favour if they manage the client relationship and process effectively. The model below (Figure 2.1 over the page) was developed in Thompson (1996a & 1997) to illustrate how the cyclical process works by relating it to the activities outlined in the phases of the client-contractor relationship from courting through to post contract follow-up, shown below:

Phases in the Relationship Between Client and Contractor:

1. Courting
2. Briefing
3. Design
4. Pre-qualification
5. Tendering
6. Post-tender negotiations
7. Awarding contract
8. Actual construction
9. Commissioning
10. Handing-over
11. Defects Liability & Final Account
12. Follow up

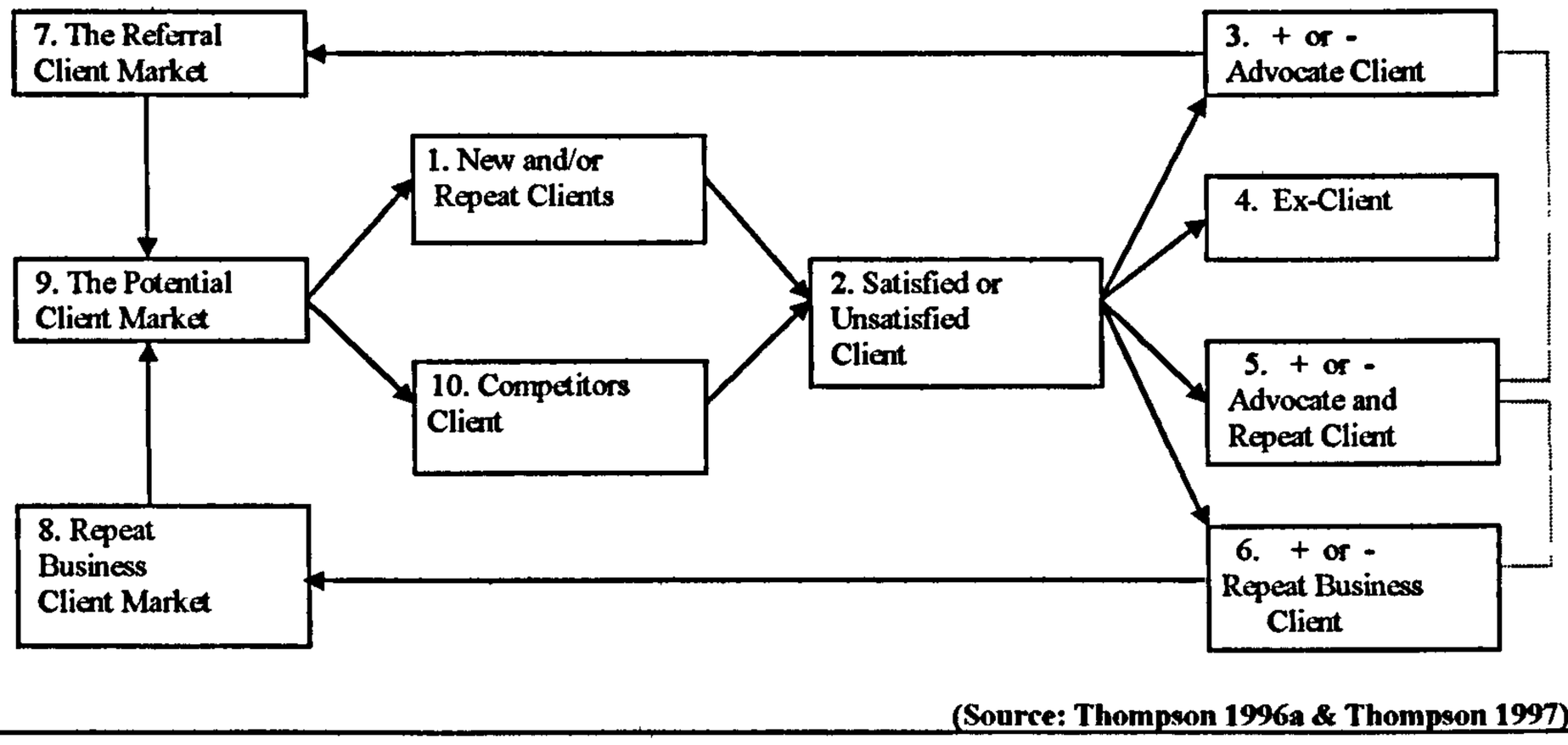
These phases of the client-contractor relationship relate directly to the Industrial Marketing Purchasing (IMP) work on Relationship Life Cycles (Ford, 1980 p.342; Dwyer et al, 1987 p.11 - Section 2.3). It can be seen that a number of activities within these phases have a direct bearing on how Thompson's (1996a p.86, 1997 p.67) cyclical model of market behaviour works.

The cyclical model can be divided into three stages (1) The three boxes on the left represent status of client markets derived from Payne's Six Markets Model. (2) The three boxes in the middle represent period of construction, from awarding of contract through to project completion and handing over. (3) The four boxes on the right indicate the possible alternative client behaviours after project completion and handing over. For this purpose, the term client also includes consultants acting on their behalf and again draws from Payne's Six Markets Model.

Box 1: Relates to courting through to awarding contracts. Total commitment must be given to satisfying the client from now until the end of the project. Having set certain expectations the contractor must perform to those expectations. Failure to do so will affect parties' willingness to co-operate in future (Heide and Miner 1992).

Box 2: This stage relates to actual construction, through to hand over and final account. The client can be either satisfied or dissatisfied with the contractors (or competitors) performance. Commitment must be toward satisfaction, otherwise the contractor runs the risk of the clients giving negative word-of-mouth in referral markets later on.

Figure 2.1: A Schematic Model of Cyclical Market Behaviour



(Source: Thompson 1996a & Thompson 1997)

Boxes 3-6: This relates to follow-up through to tender phases in the client-contractor relationship. Now the after sales service or relationship becomes crucial (Burger and Cann, 1995 p.91). In the case of construction this would be post commissioning and handing-over. Burger and Cann (1995 p.98) go on to say, '...for higher technology products - and probably other product/service categories as well (which can arguably encompass construction) - in order to achieve customer satisfaction, it is necessary to provide the customer with more than traditional services and warranties after the sale'. In construction, this means going beyond the requirements of the contract, the defects liability period and final account, and actually helping the client with their induction into the building, its initial management and possibly the on-going facilities management and maintenance. Burger and Cann (1995 p.98) believe, 'the pay-off for achieving customer satisfaction is not automatic repurchase (or repeat business and the awarding of new contracts), but rather more subtle but substantial benefits including positive word-of-mouth and improved informational relationships'. These directly aid the development of potential repeat and referral business (***Boxes 7 to 9***). Some clients will simply be uninterested once they have their building (ex-clients). It is important that consideration be given to the question of when it is appropriate for a supplier (in this case the contractor) to pursue a continued relationship marketing policy with the client (Blois, 1996 p.161; Pels, 1992 p.6; Turnbull and Wilson, 1989 p.233). Care must be taken in understanding whether the client wants an on-going relationship and, where so, what the nature of that relationship should be. This is precisely what the 'Cyclical Model of Market Behaviour' is prescribing as necessary for contractors. The importance of this cannot be underestimated in terms of contribution to future business potential.

Boxes 7-9: This stage represents the closing of the cyclical process and relates to briefing through to post-tender negotiation phases in the client-contractor relationship. Evidence shows past experience and reputation, through advocate word of mouth, plays

a major part in a contractor being short-listed for tender (Table 2.4 below). If the previous stages were managed successfully, then potential clients should come from the referral market made up of clients who are either first time buyers, one off buyers or buyers who were unsatisfied by previous competitor performance, combined with the contractor's own previously satisfied repeat business clients.

Table 2.4: Primary Pre-Qualification Criteria Clients Use in Short-listing Contractors:

Baker and Orsaah (1985 p.31):

- Low price
- The contractor company's financial standing
- Contractor's reputation
- Early completion dates or at least be able to complete on time
- Client's prior business relationships with the contractor.

Fellows and Langford (1993 p. 8):

- Contractor's general experience and reputation
- Reputation for completion on time
- Recent similar projects
- Contractor company's financial standing and record
- Personnel/teams expertise.

Bartram (1996 p.25) - Reviewing Success Factors For General Industrial Bids:

Getting Invited to Bid:	- Perceived quality of companies products or services - Relationships with existing or potential customers - Position of the company in its market place - The companies overall image - Track record in similar projects
Effective Bidding Teams:	- Leadership from senior departmental managers - Creating team spirit - Leadership from board of directors - Team members specialised knowledge of products/services - Clear instructions to team on how to handle the bid
Completing Negotiations:	- Guaranteeing quality, dates and after-sales service - Having a clear bottom line - Develop clear negotiation objectives - Detailed bid documentation - Important first formal presentation of bid

Hatush and Skitmore (1997 p.32 & 36):

• Financial soundness	*Reputation through amongst others factors:*
• Technical ability	
• Management capability	Sub-contractors
• Health and safety	Employees
• Reputation	Standard of sub-contractor's work

Jennings and Holt (1998 p.657-659):

• Low price	*Others points included:*
• Construction experience	
• Company reputation	Company image
• Financial standing	Company negotiating skill
• Prior business relationships	Company informal contacts

The contractor's ability to maintain and reinforce trust from all the parties concerned (past clients, new potential clients, consultants and other outside referral sources) must be brought into play on the final outcome of the potential client's decision making process. By reducing levels of perceived risk for the client, below those of the contractor's immediate competitors, the contractor may gain from a carefully nurtured reputation. Based on track record for previous projects, and advocate influence in repeat business and referral markets, this may provide the necessary competitive advantage to augment (if not exceed) the difficult hurdle of the lowest price wins philosophy.

2.6 Networks, Networking and the Temporary Multi-organisation

With the main emphasis on industrial markets this section examines the idea of a more interactive approach between parties. This is closely related to the issues raised above in Payne's (1991 p.21, 1995 p.31) Six Markets Model and Cherns and Bryants (1984 p.181) Temporary Multi-organisations. Focus is on networks, their development and strategic role in competitive advantage terms.

Ford (1980 p.339-40) in examining industrial markets says, 'Buyer-seller relations can be examined with reference to the interaction approach as developed by the IMP group' Within a network of organisations and individuals, '...this sees buyer-seller relationships taking place between two active parties. This is in contrast to the more traditional view of marketing commonly found in consumer markets '...which analyses the reaction of an aggregate market to a seller's offering.' In construction, where you are referring to just the client and contractor, as with other industrial market relationships, either party can take the initiative. Both companies are likely to adapt in order to accommodate the other and neither is likely to be able to make unilateral changes in activities as buyer or seller (client or contractor) without consideration, if not consultation, with the opposite party.

In reality they are working within a team also making a contribution that may include any number of roles, including design, monitoring, installation or costing, and these parties may also initiate a need, ideas, or contribute toward decisions made. This team approach to decision-making is made by what is referred to as the Decision-making unit or DMU (Smyth, 2000 p.100). In the IMP literature where complex procurement is being negotiated (industrial purchase) the decision would be made by what they call the 'Buying Centre' or 'Buying Team' (Ford et al, 1993 p.272; Anderson and Narus, 1999 p.107). The contractor organisation must understand who is in these teams and the contribution they make, when negotiating or working with them.

The IMP work on industrial markets and the interaction approach has been built upon a number of factors developed through empirical studies considered to be particularly important in industrial markets. Before IMP these appear to have been largely neglected in previous research:

1. Both buyer and seller are active participants in the market. Each may engage in search to find a suitable buyer or seller, to prepare specifications of requirements or offerings and to manipulate or attempt to control the transaction process (Reid, 1987 *in* Burger and Cann, 1995 p.92).

This is less so in construction, where the client, working through other parties such as a design team, takes greatest responsibility for engaging the contractor. The exception to this is where the contractor courts a client with promotion and image building exercises and even then these are also targeted at consultants. The design team, with the agreement of the client, will prepare designs, specifications and bills of quantity whilst having control over the transaction process in the early stages (e.g. from briefing through to awarding contract). The client representative, usually the architect, will as head of the design team help put together the long list of contractors for pre-qualification and later the short list of contractors for tendering. The client will have the final say, but clearly,

the architect and frequently the quantity surveyor will be very influential. However, it should be noted that the purpose of Design and Build (D&B), has been to alter this, by reducing the architects intermediary influence and bringing the contractor close to the client much earlier.

2. The relationship between buyer and seller is frequently long-term, close and involving a complex pattern of interaction between and within each company. The marketers' and buyers' task in this case may have more to do with maintaining these relationships than with making a straightforward sale or purchase (Metcalf et al, 1992 p.28-29).

As mentioned earlier, the exchange process between clients and other key parties to a building project is highly interactive over an extended period (section 2.2). However, in construction this extended period often only applies to one project transaction, after which the relationship is normally broken. Therefore, for the first part, behaviour in construction has much in common with IMP research findings. However, relationships have been managed poorly in the past (Smyth, 2000 p.107). Although the transaction process during a project provides an ideal opportunity for a relationships to develop, the UK construction gives little consideration to maintaining these relationships particularly well, either during the project, and certainly afterwards, either by the client or the contractor (Thompson, 1996a p.80; 1997 p.66). The construction industry is project focused, adversarial and stricken by a conflict culture (Wilson et al, 1995 p.42; Gardiner and Simmons, 1992 p.459), so much so that a comprehensive set of conflict management tools has developed specifically for UK construction (Hellard, 1988 p.xvi; Fenn and Gameson, 1992 p.10). 'Wrapped up in organising and watching each others' contractual and functional responsibilities, project teams have lost sight of the client' (Thompson, 1996a p.78). This type of behaviour has had a dramatic effect on the performance of the industry in terms of both projects and relationships (Gardiner and Simmons, 1992 p.62 & 72; NECD; 1991 p.8-9).

3. The links between buyer and seller often become institutionalised into a set of roles that each party expects the other to perform. For example, the role of contractor depending upon a strictly defined procurement route, or the attempt by contractors to submit the lowest bid.

Ford (1978 *in* Ford, 1982 p.17) tells us, routinization of exchange episodes over a period of time leads to clear expectations in parties' roles and responsibilities. Eventually these expectations become institutionalised to such an extent that they may not be questioned. These expectations may have more to do with the traditions of an industry or a market than rational decision making. There is clearly an element of this in construction. With norms and procedures developed to help manage the Temporary Multi-organisation, for many the standardisation of procurement routes, contracts and conflict management procedures has become a dominant part of the industry. So much so, that when things fail to work, e.g. lowest price, excessive claims, cover-ups, and opportunistic behaviour the industry continues on self-destruct mode finding it difficult to break the cycle.

Some companies' reputations have suffered severely as a result. Clearly this is not entirely the fault of the contractor, the client has also fallen into the trap of institutionalised expectations such as, selecting contractors through competitive tendering against a bill of quantities, believing it is acceptable to continually drive down the price even long after the project has lost profitability, and then delaying payments. This may in part be due to the poor expectations that the client has learned to have of contractors, due to their claims orientated performance. It may also be because intermediaries legitimise their position within the project team by introducing caution in the client's perspective of the contractor.

These points have in part been reflected in UK construction industry practices. However where effective management of on-going relationships are concerned there are some

factors that are particular to construction. This is partly due to practices developed over time (possibly as a result of government intervention intended to give competitors equal opportunity to win contracts) that have resulted in price being the key competitive strategy. However, as stated earlier (section 2.3), the major problems arise from a project orientated industry, which has failed to consider fully the importance relationships must play where parties are working together in the complex networks described earlier as Temporary Multi-organisations (TMO). One point to consider in examining a relationship is whether to focus purely upon the interaction between two nodes in the network. After all, companies are embedded in a range of interacting relationships, and when examining any one relationship some consideration must be given to the other parties.

Cherns and Bryant (1984 p.181) conceptualise the construction project as, '...an engagement of parts of several separate and diverse organisations - clients, consultants, contractors etc. - for the limited and finite purpose of bringing a building into being from inception to completion'. 'The business of managing the whole process is the function of a special kind of organisation that is set up for this purpose'. This they call 'a Multi-organisation since its membership is drawn from representatives of many different organisations'. Furthermore, these 'representatives will eventually disperse, going back to their own organisations or on to some new project when the building is complete' hence the term *Temporary Multi-organisations.*

Relating this to IMP, Ford (1980 p.340) tells us, '...all companies are continuously involved in a wide range of interactions'. Each individual node interacting with several others. These interactions, '...are not the same in all situations'. They, 'may be frequent or infrequent, regular or irregular, explicit or implicit, conscious or unconscious. Each

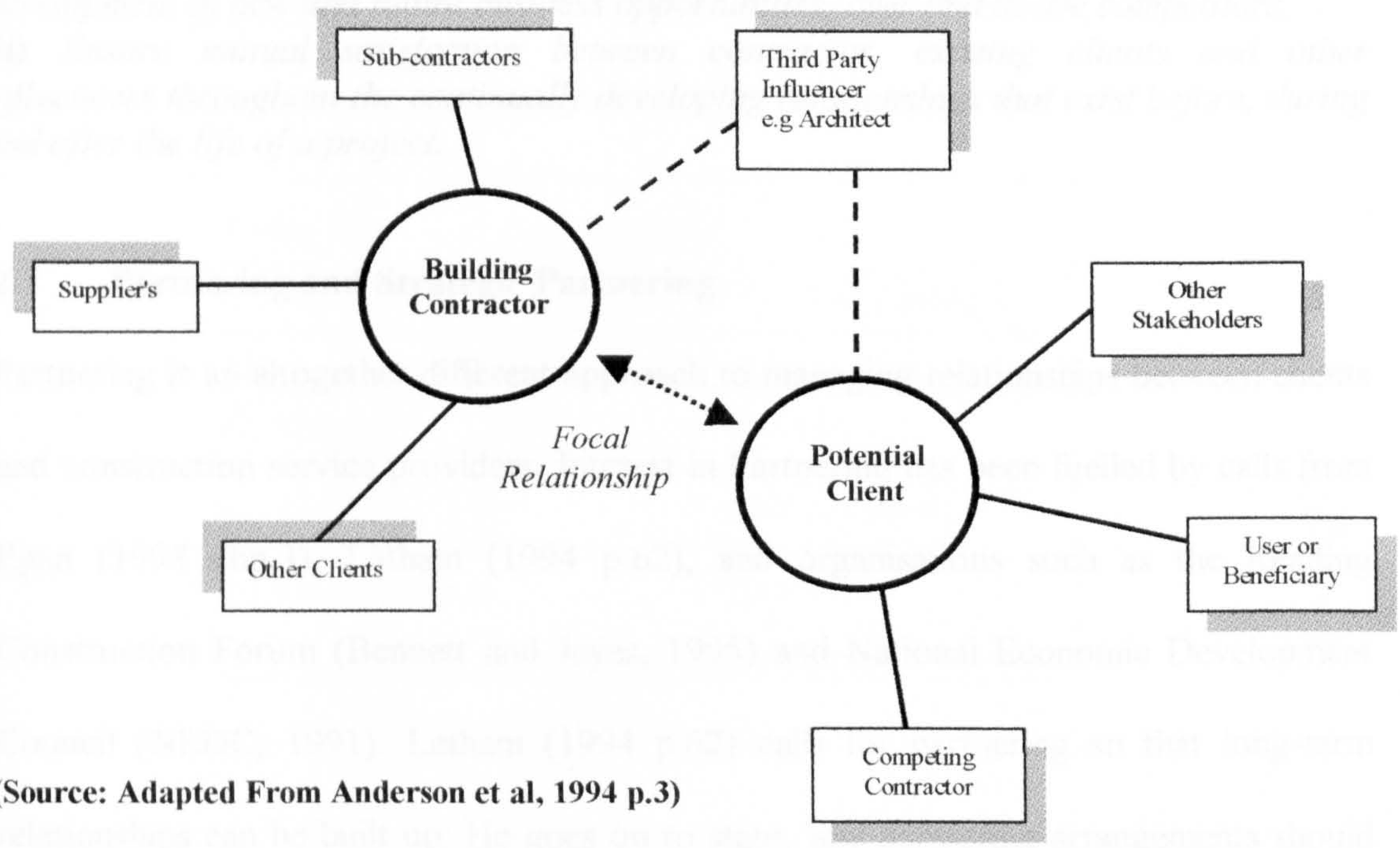
interaction may be individually more or less important, but collectively they comprise a comprehensive picture both of the company and of the reasons for its existence'.

Furthermore these networks, '...emerge and develop as a consequence of interaction. Through interaction, firms exchange resources, products and services, they influence and adapt to each other's ways of performing activities and also develop various kinds of bonds with each other' (Hakansson and Johnson, 1988 p.1). However, if we expand the focus from a specific project, as is the purpose of TMO's, the view includes additional relationships which the representatives have been, are, or will be involved in. This changes the overall view of the TMO to a network, which is a composite of a larger number of actors and pattern of relationships tied together, an idea based upon a principle identified by Iacobucci and Hopkins (1992 p.5). One consequence of this is that each representative has more than likely had experience of parties to other projects and brings that experience with them. Likewise, they take the experience of this specific project, and of the other representatives on it, with them to future projects. What therefore exists is a kind of virtual network of past, present and future associations and experiences between the different representatives involved on many disparate projects. A crucial question therefore becomes, how should these developments in business practice be regarded conceptually, as well as managerially?

Anderson et al (1994 p.1) assert that if, 'Business Networks are to possess advantages beyond the sum of the involved relationships, this must be due to considerations that take place within business relationships and their connectedness with other relationships'. Connectedness is the extent to which exchange between parties in one relationship impacts on exchange in another relationship. Relationships can exist between parties indirectly, through a third party. With TMO's this means a relationship can be formed

between a client and contractor who have never directly worked with each other, because an architect having worked with one during an earlier project now works with the other. With this the Architect brings with him both positive and negative experiences of the contractor's performance. Referred to as Focal Relationships (Figure 2.1 below), these can simply start by word-of-mouth reputation in the industry. By linking this virtual network phenomena with Payne's (1991 p.21; 1995 p.31) Six Markets Model the opportunity exists to build upon these reputations to such an extent that new and repeat business might be won through referral markets (Figure 2.2).

Figure 2.2: <u>A Focal Relationship Derived From A Network Operating Beyond Any One Immediate Project.</u>



(Source: Adapted From Anderson et al, 1994 p.3)

Therefore, the effect of combined relationships between parties offers more than just a finite relationship during any one project. This clearly has potential for marketers wishing to pursue appropriate relationship marketing strategies in the construction industry, by using referral networks for informal marketing communications (Reingen and Kernan, 1986 p.370) such as word-of-mouth. The primary channel for this being clients and

consultants who have had direct experience of the contractor, but also the extended network for which these people can act as 'Social Ties' (Brown & Reingen, 1987 p.350).

Contractors should therefore be trying two achieve two things:

1. ***Create*** a network of relationships with key advocates in referral markets with the potential for providing mutually complementary rewards.
2. Develop the ability to ***harness*** synergistic potential in pursuit of a sustainable competitive advantage.

It is on these abilities that the two underlying principles of Relationship Marketing for UK Building Contractors might be based.

(i) *To develop relationships with clients and other influential parties which, through them, enhance the likelihood of winning future business or ensure a continual development of new and future business opportunities, over and above competitors.*
(ii) *Ensure mutual satisfaction between contractor, existing clients and other influencers throughout the continually developing relationships that exist before, during and after the life of a project.*

2.7 Partnering and Strategic Partnering

Partnering is an altogether different approach to managing relationships between clients and construction service providers. Interest in Partnering has been fuelled by calls from Egan (1998 chp.3), Latham (1994 p.62), and organisations such as the Reading Construction Forum (Bennett and Jayes, 1995) and National Economic Development Council (NEDC, 1991). Latham (1994 p.62) calls for partnering so that long-term relationships can be built up. He goes on to state, 'any partnering arrangements should include mutually agreed and measurable targets for productivity improvements'. Egan (1998 chp.3) calls for greater effort to be put into integrated project processes highlighting product development, project implementation, partnering the supply chain and production of components as four key elements for attention. However, Egan (1998 *para*.45) in reference to Partnering goes on to say, '...There is already evidence that it is more demanding than conventional tendering, requiring recognition of interdependence

between client and contractors, open relationships, effective measurement of performance and an on-going commitment to improvement'.

Numerous writers have promoted Partnering as the new approach to managing historically difficult relationships experienced in construction (Hammond, 1995 p.19; Hellard, 1995 p.2-3; Harback et al, 1994 p.23; Crowley and Karim, 1995 p.33; Ellison and Miller, 1995 p.44; Neilsen, 1996 p.19). So much so that major clients such as, J. Sainbury PLC and the British Airport Authority, and contractors like Laings and Balfour Beatty Construction Ltd. have been developing these type of arrangement.

Partnering represents a new approach to team working on projects in order to overcome some of the historical difficulties faced by the industry (Table 2.5).

Table 2.5: **Partnering**

Old Paradigm	*New Paradigm*
• Adversarial	• Co-operative Teamwork
• Win-Lose	• Win-Win
• Stressful	• Satisfying
• Litigation	• Accomplishment
• Bureaucratic Inertia	• Risk-Taking Action
• Finger-Pointing	• Handshakes

(Source: Harback et al, 1994 p. 26)

Partnering is defined by Bennett and Jayes (Reading Construction Forum 1995 p.2) as;

'...a management approach used by two or more organisations to achieve specific business objectives by maximising the effectiveness of each participant's resources. The approach is based on mutual objectives, an agreed method of problem resolution and an active search for continuous measurable improvement. Partnering can be based on a single project (Project partnering) but greater benefits are available when it is based on a long-term commitment (Strategic Partnering)'.

Mutual objectives may include many issues, but common subjects include:

1. improved efficiency
2. cost reductions
3. guaranteed profits
4. reliable product quality
5. fast construction
6. shared risks
7. reliable flow of information

This relates to Porter's (1993 p.14) reference to Relationship Marketing:

The, '...process whereby the buyer (client) and the provider (contractor) establish an effective, efficient, enjoyable, enthusiastic and ethical relationship - one that is rewarding to both parties'.

This can also been seen as essential if problems are to be solved, conflict is to be avoided or managed and both parties are to feel equally satisfied by the arrangement they have. This point is reinforced by Gummesson's (1994 p.6-7) later work where he recognises that both customer (client) and seller (contractor) can be active, seeing each other as partners in a win-win relationship. However, if Partnering is to succeed certain fundamental criteria have been prescribed as essential, one of which is *Trust* (Egan, 1998 *para.*17; Latham, 1994 p.87; Ellison and Miller, 1995 p.45; Harback et al, 1994 p.24). Yet those who prescribe trust have been unable to adequately define it in the context of the complex exchange process experienced between client and contractors within the UK construction industry. Bennett and Jayes (1995 p.3) go as far as to say that parties involved, 'need to understand each others problems, concerns and weaknesses and be prepared to discuss them without fear that their openness will be used against them'. Whilst Powell (1992 p.393) has stated how trust can only survive a certain amount of conflict before being lost. Hannah's (1990 p.1) research on trust compares client, architect and constructor trust in one another. However, is it US based, and does not take into account the extended period of exchange that is experienced between clients and contractors, or consider the effects of the temporary multi-organisation that surrounds this. In seeking to develop better marketing strategies through the use of Relationship Marketing principles within the UK construction industry trust represents a good focus for this research. Especially as it was identified earlier as being the essential cornerstone to developing positive on-going marketing relationships (see section 2.3).

2.8 Summary

Implications for 'Construction Marketing' arising from the development of Relationship Marketing, Industrial Marketing and Purchasing (IMP) and Partnering reveal some important points. Compared to both consumer and many other industrial markets, construction is a complex business. The exchange relationship between client and contractor during any one project occurs over an extended period of time compared to exchanges in many other industries. This in part is due to the need for the client-contractor exchange to work within a large, complex network of individuals and organisations, referred to by Cherns and Bryant (1984 p.181) as the Temporary Multi-organisation. However, in examining this in relation to both the 'Industrial' and 'Relationship Marketing' literatures it becomes evident that this complex network can provide opportunities beyond its purpose of facilitating a building projects' progress, and actually work for the contractor in their strategic marketing efforts.

It has been shown that marketing efforts need to contribute to improving relationships within the Temporary Multi-organisation, and that through this the contractor has the potential to develop a stronger competitive advantage where short-listing for tender, awarding of contracts and repeat business are concerned. What the literature highlights is that central to the effective development of relationship marketing strategies is the need for trust (sections 2.4 and 2.5 and 2.7). However, calls in construction for the crucial development in trust (Egan, 1998 *para.*17; Latham, 1994 p.87; Ellison and Miller, 1995 p.45; Harbuck et al, 1994 p.24; Buttle, 1996 p.9) are not backed up with knowledge of how this might be developed, especially given the way exchange relationships work in construction. It is therefore proposed that this trust be the central focus for primary research in this thesis, because according to the literature attempts at developing many of

the strategies outlined in this chapter will be undermined by the lack of trust that is endemic in construction. Therefore, chapter three examines the trust literature developed for the most part outside of the construction disciplines, and discusses the implications of this for construction marketing and its management of relationships.

CHAPTER THREE

Social Trust in the UK Construction Industry

3.0 Introduction

The previous chapter looked at relationships between clients and contractors operating in the private building sector of the UK construction industry, with a marketing orientated focus. In conclusion it was show trust is of central importance to this thesis.

This chapter concentrates on the trust literature. Starting with an examination of the different types of trust arising out of previous research, problems specific to the UK construction industry, which hinder the development of trust between clients and contractors are then considered. The chapter is summarised with a definition of trust within the relationship between clients and contractors.

However, while this helps narrow the focus, consideration still needs to be given to a number of issues. This project examines individual and group relationships operating in a commercial environment, which are economically motivated, with varying levels of power. This within an industry working in temporary multi-organisations made up of different companies and individuals, working on high-risk projects, within a renowned adversarial culture. Furthermore, evidence of academic or practitioner expertise on trust within the construction management or construction marketing literature is scant. Therefore, it is necessary to draw upon the broader body of work on trust when considering these issues, before deciding which tools are most appropriate to understand and measure it for the purpose of this research.

The chapter introduces a 'Risk-Confidence Continuum', designed, to explain the idea that risk and trust exist together, and that what is needed is a change in strategic management culture within construction management thinking that draws focus away

from the risk end of the continuum and toward the confidence end. This is important if there is to be any hope of developing trust between clients and contractors within the UK construction industry. That would require a change in the thinking behind these issues by contractors, clients and their consulting team, moving away from simply examining project related risk and how it is managed, and toward a reduction of client perceived-risk of contractors. This should lead to the development of client confidence in contractors and contribute to building reliable forms of trust. To clarify, a distinction is drawn between risk inherent in any construction project, the perceived risk attributed to contractors specifically, and any dealings the client may have with them. The point being that clients are likely to prefer to undertake the risks related to a construction project with a contractor they have confidence in, rather than with one which represents additional risk.

3.1 Types of Trust

Morgan and Hunt (1994 p.23-24) refer to earlier studies highlighting how trust is central to the effective development of many aspects of positive on-going relationships (Moorman, Deshpande and Zaltman, 1993; Berry and Parasuraman, 1991; Anderson and Narus, 1990; Schurr and Ozanne, 1985; Hovland, Janis and Kelley, 1953). Referring to Spekman (1988 p.79), they state that trust is so important to relational exchange that it is the, "cornerstone of the strategic partnership". Recognition in the significance of this to construction management and marketing has started to grow (Woodward & Woodward, 2001 p.355; Smyth, 2000 p.295; Wong et al, 2000 p.797; Thompson, 1998 p. 7; 1997 p.66; 1996 p.88; Powell, 1992 p.393; Hannah, 1991 p.31).

While trust can and has been defined in many ways it is important to remember the background against which this study is taking place. While the argument has already been made for the importance of trust, it should be noted that it can be defined differently

depending upon perspective. According to Hall of Birse PLC, '...the level of trust you require is rarely found in the construction industry.' 'The whole industry has been tarnished by confrontation and as we learn about words like integrity and responsibility so we learn to deal with words like trust.' It is safe to say that trust in a construction context is very hard to define because, as will become clear, it involves so many areas.

The concept of trust can have many, varied connotations. For example, to view trust from a religious perspective conjures up ideas of unquestioning faith or 'faith in god' (Misztal, 1996 p.15). Whilst Blass (1996 p1529), reflecting on the work of Milgram (1963, 1974), talks about trust as the obedient willingness to relinquish responsibility for one's own actions when someone in charge tells them what is being done is reasonable. Here, 'a person no longer views himself as acting autonomously, but rather as an agent of an authority'. However, with 'Transaction Cost Economics' it may be the willing reliance on other parties not to undertake opportunistic behaviour where dependence upon a resource becomes evident once investment in an alliance has taken place. Simply, to be prepared to undertake the '...fiduciary risk of opportunistic exploitation of dependence' (Nooteboom et al, 1997 p.309). The type of trust being examined in this thesis is surrounded by parties who are commercially driven, with a focus on an exchange relationship which is ultimately profit motivated. Therefore this review of trust literature will focus primarily on definitions of trust arising from the marketing, management and economic disciplines rather than from areas such as culture and political science, religion, or social phenomena such as the family (Fukuyama 1996; Misztal 1996; Gambetta 1988).

3.1.1 Trust as Cognisance of Vulnerability Risk

Moorman, Zaltman and Deshpande (1992 p.315) talk of trust as the willingness to accept vulnerability. Accepting vulnerability is dependent upon the trustor being cognisant of the risks (Mayer et al, 1995 p.712) or possible undesirable consequences of their act. In

short, the trustor must be aware of the risks that make them vulnerable if they were to trust the contractor, and then proceed while accepting those risks. Currall and Judge (1995) defined trust as, 'an individual's behavioural reliance on another person under a condition of risk'. As already shown above, according to Nooteboom et al (1997 p.309) trust can be defined as, 'the willing reliance on other parties not to undertake opportunistic behaviour'. However, others choose to define trust in a different way. Ali (1994 p.117) asserts that, 'Customer-perceived risk is an important issue in the provision of some services. The antidote to risk is trust. Where risk can be identified it is important to consider how any existing trust between buyer and seller may be used and also how trust may be developed'. Ali (1994) goes on, 'Just as risk can be considered in terms of the certainty of an unfavourable outcome for an event, so trust can be considered in terms of an individual's confidence that a positive event rather than a negative one will occur'.

3.1.2 Confidence Based Trust

A close association is made by construction clients (and clients generally in other industries), between the terms 'trust' and 'confidence' (Woodard & Woodard, 2001 p.363; Wong et al, 2000 p.803; Michell et al, 1998 p.169; Smyth & Thompson, 1997, p.16; Thompson, 1997, p.66; Ali, 1994 p.119; NEDC, 1991, p.14). This idea of confidence as a defining point of trust is also noted by Moorman et al (1993a p.3; 1993b p.82) who define trust as, '...a willingness to rely on an exchange partner in whom one has confidence'. Mayer et al (1995 p.713), studying trust within organisations, refer to Deutsch's (1960) work on why one person would trust another person to produce some beneficial events. They quote Deutsch (1960 p.125) as saying the, 'individual must have confidence that the other individual has the ability and intention to produce it'. Mayer et al (1995 p.713) also refers to Cook and Wall (1980 p.39), who defined trust as, 'the

extent to which one is willing to ascribe good intentions to and have confidence in the words and actions of other people'. This is further reinforced by Michell et al (1998 p.160). Having investigated the foundations of trust based on the experience of middle and junior management within a number of companies in sectors as diverse as banking, manufacturing and retail, they linked trust with, amongst other variables: confidence, personal experience, dependability, quality standing and predictability.

Ali (1994 p.119) identified four key factors that affect buyer confidence when procuring professional services such as a building contractor. They are as follows;

- Clients' personal assumptions **(clients' own beliefs and attitudes).**
- Past experience of others **(reputation).**
- Opinions held by others whom the buyer respects **(advocacy and the word of mouth transfer of reputation noted above).**
- Clients' own past experience **(of the key third party for whom confidence is tested, that has had personal past experience of the service provider).**

To understand decision-makers' trust behaviour toward contractors, these factors may help. The importance placed on reputation and clients' previous experience of a contractor when short-listing a contractor for tender is well documented (Jennings and Holt, 1998 p.657; Bartram, 1996 p.25; Fellows and Langford, 1993 p.8; Baker and Orsaah, 1985 p.30-31) (Table 2.3). Consideration should also be given to possible negative attitudes held by clients toward the idea of trusting their contractor.

3.1.3 Behavioural Trust

Grönroos (1994 p.9) highlights from Moorman et als' (1993) work that trust can also be viewed as, 'a behavioural intention or behaviour that reflects reliance on the other partner and involves uncertainty and vulnerability on the part of the trustor'. This point may have some merit. However, they go on to say, 'If there is no vulnerability and uncertainty trust is unnecessary, because the trustor can control the other partner's actions'. This element of their definition is questionable. To suggest that where there is limited vulnerability the

trustor has control over the other party's actions presents an unrealistic leap in logic. There are little grounds to assert that just because one party perceives little vulnerability from another they have control over that party's actions. Closer examination of Moorman et al's (1993 p.82) original text supports this view. What they actually say, whilst reflecting upon the work by Coleman (1990) and Deutsch (1958) is, 'uncertainty is critical to trust, because trust is unnecessary if the trustor can control an exchange partners actions or has complete knowledge about those actions'.

Returning to behaviour, Brock-Smith and Barclay (1995 p.9), in discussing the literature on social exchange theory, state, 'a variety of actions may indicate trust, five standing out as being central to on-going exchange relationships'. This being precisely the type of relationship experienced by clients and contractors. The five actions (or behaviours) are outlined by Brock-Smith and Barclay as follows:

- ***Relationship-specific Investments*** - Where resources, effort and attention are devoted to the relationship that has no outside value and cannot be recovered if the relationship is terminated (Wilson and Mummulaneni, 1988).
- ***Control Reduction*** - The extent to which exchange partners withhold the use of power in their relationships (Gibb, 1964; Zand, 1972).
- ***Influence Acceptance*** - The degree to which exchange partners voluntarily change strategies or behaviours to accommodate the desires of the other (Blau, 1964).
- ***Communication Openness*** – Formal and informal sharing of timely information between partners. Concern with the mutual disclosure of plans, programmes, expectations, goals, motives and evaluation criteria rather than the quantity or frequency of information exchanged (Anderson and Narus, 1984).
- ***Forbearance of Opportunism*** - Acting in the spirit of co-operation, not cheating and not withholding helpful action (Buckley and Casson, 1988; John, 1984).

Smeltzer (1997 p.42) identifies some 15 behaviours that indicate a trusting environment between suppliers and buyers, of which seven could apply to clients. They are:

- Listening/reacting to supplier's problems
- Open communication
- Mutual respect
- Sharing of cost savings
- Honesty
- Organisation
- Positive attitude

Through these points it may be possible to gain an appreciation of how client trust manifests itself, or not, through the actions they take whilst working with their contractor.

3.1.4 Co-operative Based Trust and Effective Communication

Zand (1972 p.229), in examining trust and managerial problem solving in the electronics manufacturing sector, found, 'highly significant differences between high-trust groups and low-trust groups in the clarification of goals, the reality of information exchanged, the scope of search for solutions and the commitment of managers to implement solutions'. Trust has simply been shown to be higher where there is good communication and parties involved can rely upon each other. Zand goes on (1972 p.231) to show a close association between trust and the reduction of control over the other trusted parties. He expresses the inter-relationship between control and trust and increasing ones vulnerability to others by accepting more interdependence between trustor and trustee. They, 'impose less procedure to control others', demonstrating, 'greater confidence others will do what they agree to'.

Anderson and Weitz (1989 p.320), in examining how manufacturer sales representative develop stable, long-term relationships with other channel members, also demonstrate the link between trust and communication. They state, 'older relationships involve less communication rather than more, suggesting the parties have developed such a good understanding of each other that they can make their points more efficiently'.

Anderson and Narus (1990 p.50) in their model of working partnership, show how communication is closely associated with and feeds into co-operation and then into trust, which is based upon one group's past and present experiences of the other (p.49). This

feeds into the question of satisfaction on the part of the trustor, showing a strong negative correlation with issues of conflict between the parties involved (p.53).

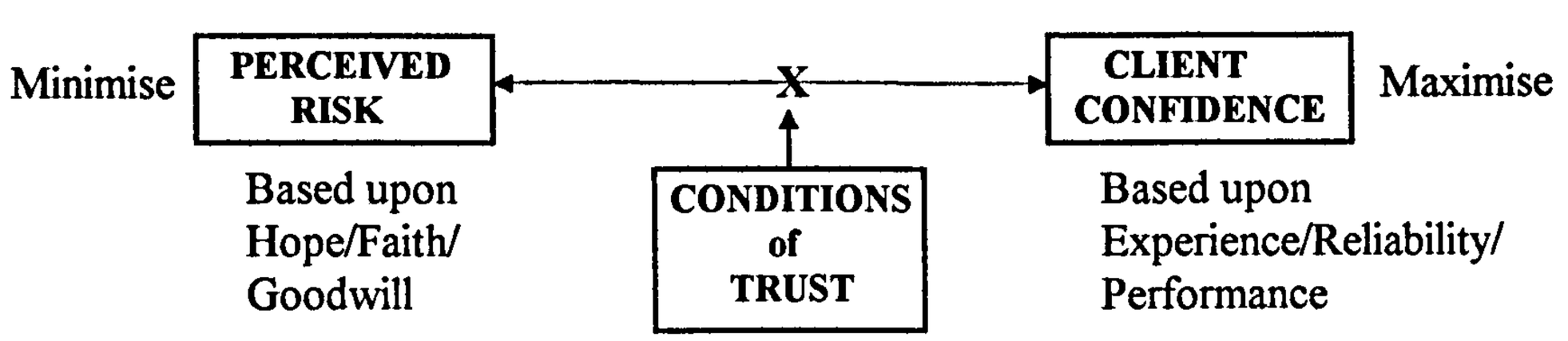
3.1.5 Types of Trust Summarised

There appears to be no consistent definition of trust. Some favour the idea of reliance on another party under a condition of risk, uncertainty and vulnerability, while others refer to the idea of confidence that the other party will not behave opportunistically and can deliver with a degree of confidence what has been agreed or promised. It may be better to say that trust exists under different climates of relationship. Some relationships are high risk and uncertain, thus leaving the trustor vulnerable, while other relationships can be described as safer and more dependable, where one party can with some accuracy anticipate the other party's actions. In this case, trust exists due to a higher level of confidence in the other party rather than the need for control. Where one party does have control over the actions of another and is dictating terms under which the other has no flexibility or choice, then there would need to be a degree of monitoring the other's performance in relation to those demands. In that case, only when there is permanent monitoring could one realistically argue that trust is unnecessary, otherwise there must always be a degree of trust, whether that is under conditions of perceived risk or confidence.

Cowles (1996 p.1) goes in two directions. He refers to Grönroos (1994), who describes trust as, 'a belief in the other partner's trustworthiness, that results from the expertise, reliability or intentionality of the partner' (p.9). At the same time it is, 'a behavioural intention or behaviour that reflects reliance on the other partner and involves uncertainty and vulnerability' (p.9). Cowles (1996) clarifies this dichotomy by drawing a distinction between the terms 'trust, trusting behaviour and trustworthiness'. This goes some way to explaining what is happening.

One party can trust another party who is clearly not trustworthy, whilst in another situation one party may behave in a trusting way without being cognisant of the trust concept, and simply be acting on their confidence in that other party. But this does not reduce the significant point that one is still behaving in a trusting way. One party places Greater emphasis on the need for trust where they perceive higher levels of risk in their dealings with the other party. Figure 3.1 The 'Risk-Confidence Continuum' below was developed to clarify this distinction. In the case of clients and contractors, it may be possible for a client to have high levels of perceived risk in their dealings with contractor and yet still choose to trust them. Alternatively, where a contractor can develop higher levels of perceived confidence from the client, the client may be willing to embark upon trusting behaviour, whether they are cognisant of the trust concept or not.

Figure 3.1: Risk-Confidence Continuum



(Source: Thompson 1997 p.66, Also found in Smyth 2000 p.295)

Where trust is practised within high-risk relationships, involving uncertainty, vulnerability and/or opportunities for opportunistic behaviour by the other party, then the trust would be based simply on goodwill, hope or faith that the other party will not take advantage of the situation. On the other hand, with trust practised under circumstances involving high levels of confidence, the trustor would be better able to anticipate the behaviour of the other party, may consider them to be reliable and might even have had past experience of how the other party works, and their performance. There will be a greater certainty that the other party will not behave opportunistically (Nooteboom et al, 1997 p.309), or that

they have more, 'confidence that a positive event rather than a negative one will occur' (Ali, 1994 p.118; Deutsch, 1960 p.125), through the actions of the trusted party.

It must be noted however, that neither risk nor confidence based trust can ever exist pure and absolute by themselves. Both concepts of 'risk-related trust' and 'confidence-related trust' refer to consequential expectations by the trustor that may or may not lead to disappointment. Mayer et al (1995 p.712) report on work by Johnson-George and Swap (1982 p.1306) saying, 'willingness to take risks may be one of the few characteristics common to all trust situations'. They also refer to Kee and Knox (1970) as saying, 'the trustor must be cognisant of the risk involved'. Mayer et al (1995 p.712) go on to highlight, 'the critical addition of vulnerability', 'being vulnerable implies there is something of importance to be lost, therefore making oneself vulnerable to risk' (Gambetta, 1988; Boss 1978; Zand, 1972). They conclude this by saying, 'Trust is not taking risk per se, but rather it is the willingness to take risk' (p.712). Here an important distinction must be drawn between perceived risk inherent in the undertaking any project and the perceived risk associated with a particular contractor and how they are likely to behave during and after the project. With reference to the continuum shown above (figure 3.1), the question a client should ask themselves is; with which type of contractor are we willing to embark upon project related risks, a contractor with whom we perceive further risk or a contractor with whom we have higher levels of confidence?

Clark and Payne (1995 p7), who report the work of Riker (1974) say, 'Trust involves risk, since other people on whom one has decided to depend upon may or may not prove worthy'. In doing so we also forfeit to chance to choose somebody else, or to be self-reliant. 'Within this paradigm trust is a matter of choice and hence a kind of behaviour rather than a state of mind, when we trust we do something, such as choose one alternative over another'. This principle is reflected in the trust actions identified earlier

(Brock-Smith and Barclay, 1995 p.9; Smeltzer, 1997 p.42). The suggestion is that contractors should endeavour to move away from 'risk-based trust' and towards 'confidence-based trust' if the development of trust is to be effective in helping to build longer-term positive on-going relationships with clients.

What is clear from this review of literature is that trust is complex, making a single definition difficult. There are different types of trust depending upon factors such as the type of relationship between parties, levels of perceived risk and past experience by the trustor of the trusted party. This section has introduced a number of important terms that have been used to underpin the various definitions. Terms like, co-operation, communication, willingness, behavioural reliance and behavioural intention. Other terms include, risk, reliability, opportunism, uncertainty, vulnerability and dependency. Mention has been made of, beneficial, positive or negative consequences, expectations, promise fulfilment and potential disappointment, also monitoring, control, knowledge and past experience.

In the following section these terms are examined in relation to current practice in the construction industry. What becomes clear is the emphasis placed on project risk and its management. The effect, being one of developing ways of coping with a narrow definition of risk rather than looking at how to develop better client confidence in contractors. The way in which the industry has approached many of the terms identified so far has simply acted toward in maintaining, and in some cases even compounding, the problems of perceived risk for clients, making for many any idea of a confidence-based trust toward their contractor currently difficult to achieve.

3.2 Problems Undermining the Effective Development of Confidence-based Trust in the UK Construction Industry.

3.2.1 Willingness and Reliance

'What cannot be ignored is the idea by many in construction that to trust someone is simply not possible. In fact, it may be argued that; to trust is to be *gullible*, or foolish by expressing a willingness to rely on others in the construction process with nothing more than faith that they will perform as necessary' (Thompson, 1997 p.65). Rotter (1980 p.1) tells us that, '...as distrust increases, the social fabric disintegrates' whilst, 'unwarranted distrust can result in serious negative consequences, foolish trust or gullibility, can also lead to serious consequences'. In either case the outcome is likely to be undesirable. Kee and Knox (1970) raise the possibility that, 'a slight amount of suspicion (however that is determined) - a kind of alert but not distracting guardedness - may be facilitative'.

Suspicion and a lack of willingness to trust may also arise through difference in 'Motivation' and 'Power' between parties to a project. The solution to this is unknown, and further research is needed. However, it is not the purpose of this thesis to address these issues.

In fact *suspicion* on the part of the client and their representatives may be a large part of the problem, blurring their perceptions of contractors, and thus creating an unreasonable level of distrust. Deutsch (1960) says, 'The problem of trust arises from the possibility that if, during co-operation, each co-operator is individually orientated to obtain maximum gain at minimum cost to himself, without regard to the gains or costs to the other co-operators, co-operation may be unrewarding for all or for some'. It is possible that third parties pursuing their own interests (quantity surveyor or architect legitimising their presence) instil certain levels of perceived risk in clients' perception of contractors.

A major problem identified by Woodward and Woodward (2001 p.356) is that, unlike with the *'Temporary Multi-organisation'* as experienced in construction, many previously published studies on trust have focused on *'Permanent Organisations'*, 'where trust will have developed over a period'. They go on to highlight work by Rosenfeld et al (1991), stating, 'The very nature of projects is that they provide an environment that is substantially different', for three reasons:

(i) People who work on projects are often temporary and might lack the motivation to participate in long-term success.
(ii) The job will often be unique, thereby reducing the potential for savings from improved personal relations
(iii) The organisation is temporary thereby perhaps leading to lack of commitment on the part of those involved in developing people-building skills.

What is clear is that, ideas about gullibility, problems of suspicion and perceived risk need to be overcome. Over the past couple of decades the UK construction market place has changed. There has been a proliferation of conflicts, claims and disputes (Kumaraswamy, 1997 p.95). There have also been many new competitors. This has created a need for understanding global dynamics and new ways of competing (Yates, 1994 p.58). Developing new and innovative competitive strategies is becoming vital for construction management (Pries and Janszen, 1995 p.50). For these new innovative competitive strategies to work there must be a new era of trust. Without this the industry cannot move forward and risks suffering irreparable harm.

3.2.2 Uncertainty and Reliability

Lane and Bachmann (1996 p.389), having analysed trust as a means to reduce uncertainty and risk in vertical inter-firm relationships, conclude that '...obligatory relationships based on *goodwill* trust are relatively rare (Figure 3.1). They say, 'risk is instead reduced by trust based on commonality of expectations'. Indeed, many of the problems of trust experienced in construction are down to differences in expectations

between (and *of* other) parties to a project. This is something 'Partnering' actively tries to prevent by recommending that all parties agree 'Mutual Goals' or 'Common Objectives' (Crowley and Karim, 1995 p.33; Bennet and Jayes, 1995 p.3; Harback et al, 1994 p.23; NEDC, 1991 p.5).

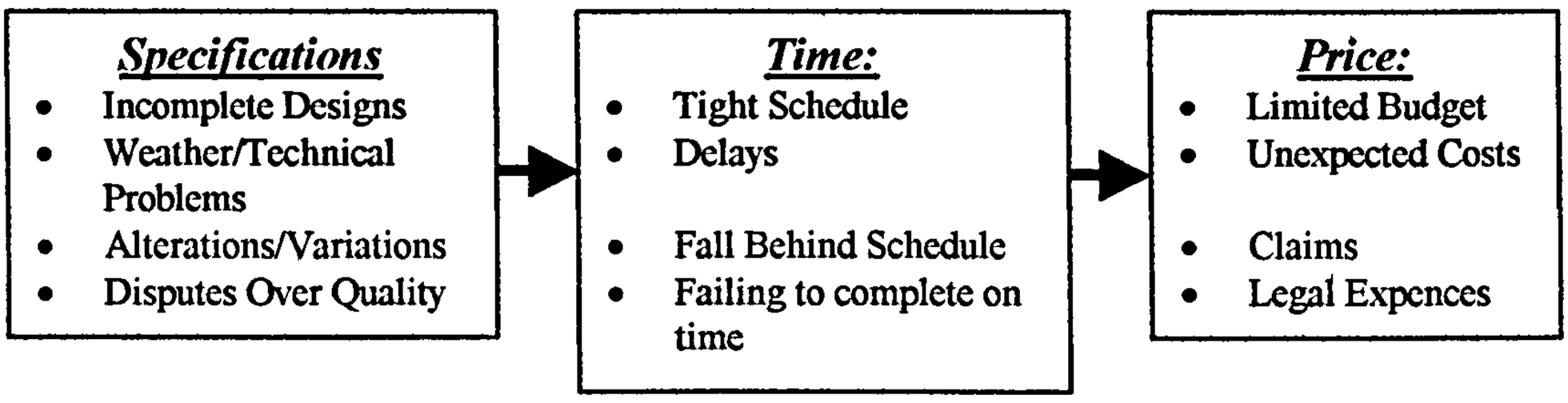
Clarke and Payne (1995 p.8), in reviewing Schelenker et al (1973 p.419), offer their definition of trust as, 'a reliance upon information received from another person about uncertain environmental states and their accompanying outcomes in a risky situation'. Construction clients are in a constant state of perceived risk due to the uncertain environment in which they are making decisions. In their investigation into project management under uncertainty, Skitmore et al (1989 p.105) note how, 'human judgement (i.e. predictions or evaluations based on incomplete or uncertain information) generally is subject to different types of error'. Highlighting the work of Morris (1986) they state, 'human judgement is a complex and idiosyncratic phenomenon with an internal logic of its own. It is precisely because of this, human judgement is often the source of uncertainty rather than a means of dealing with it. Judgmental biases provide cognitive shortcuts, which tend to optimise, a trade-off between psychological processing demands and the need for response accuracy'. However, Skitmore et al (1989 p.105) refer to work by Hogarth (1980) who studied 'Judgmental Error' and decision-making under conditions of uncertainty and who highlighted a number of areas that can lead to problematic bias. They include the acquisition and processing of information, the output processes evident in expressing the outcome of a judgement and the feedback processes affecting future judgement. As will be seen in the following sections, for the construction client there is a high potential for bias to occur in all of these areas, leading to high levels of perceived risk and, consequently, the utilisation of negative risk handling strategies. The difficulty experienced here may be exacerbated by the unquestioning

reliance on established norms and procedures in the industry, or by how project teams communicate, especially when disputes arise. In addition, there is the influence key third parties can exercise in their capacity of providing and disseminating information or decisions to and on behalf of the client.

3.2.3 Risk, Adversarial Behaviour and Conflict

The risks of a negative outcome occurring are numerous on a building project. Figure 3.2 below is divided into key categories giving an idea of the types of problema client may face giving rise to risk. This is by no means comprehensive but is indicative of the problems traditionally experienced.

Figure 3.2: Project Related Perceived Risk By Clients



Conflict arises over the costs of variations and unforeseen problems, and there is arguably an over dependence upon claims and legal remedies. How this has arisen is also not the purpose of this study.

In construction there has been created the term 'Confliction', meaning the active process of setting up, promoting or encouraging conflict. The idea that some might deliberately put effort into creating a conflict (Hellard, 1988 p.xvii). Loosemore et al (2000 p.447) state, 'The issues of conflict management has been elevated to one of the most important contemporary challenges facing the construction industry'. They go to highlight the view by Hughes (1994), '...that construction managers should positively invoke conflict because it is the doorway of opportunity to organisational learning and creativity, and to

the fulfilment of organisational and individual potential'. However, Loosemore et al (2000 p.447) do say that, '...claims to tolerate or encourage construction conflict remain speculative and potentially damaging'.

A rising conflict culture has led to a rising spiral of perceived risk, protective adversarial behaviour, resulting in greater conflict and then even higher perceived risk for clients. In concluding, Loosemore et al (2000 p. 454) say that calls for conflict are counterproductive, and that there is justification for the current emphasis upon conflict reduction in the construction industry. Latham (1994 p.87), whilst reflecting on the experience of the US construction industry, tells of how conflict has degraded positive relationships between members of the project team to the level of, 'a contest consumed in fault finding and defensiveness which results in litigation. The industry has become extremely adversarial and we are paying the price'. Latham (p.87) goes on to say, 'Disputes will continue as long as people fail to trust one another'. Loosemore (1999 p.186), discusses, 'a range of conditions which lead a dispute into a self-perpetuating cycle of unwanted escalation which becomes increasingly difficult as time goes by'. He makes seven recommendations to help reduce dispute escalation:

1. **Information Management:** efficient communication between adversaries to help avoid misunderstandings.
2. **Avoid the coercive imposition of solutions:** avoid adoption of aggressive tactics, which leads to a tandem escalation between parties. Break the mould and show willingness for conciliation and compromise.
3. **Strive to achieve a common definition of the disputed matter:** minimise uncertainty levels surrounding responsibility. This tends to be exploited by those intending to further their interests. Prior to project commencement, undertake an all party risk analyses, clarifying perceptions about risk distribution through open discussion.
4. **Beware of allocating blame:** tendency is toward those implicated, to inflexibly adopt aggressive bargaining codes in the defence of their interests.
5. **Beware of temporary coalitions:** used to temporarily increase power bases in negotiations to further certain party's interests. It intensifies the ferocity of disputes by clarifying and strengthening differences.
6. **Consider the structure of project teams:** at outset of a project, avoid combining organisations and individuals who have pre-conceived negative perceptions of each other from recently completed projects.

7. **Beware of goal inflexibility:** both in client goals and those of the contracting organisations employed. A difficult balance needs to be striven for between project goals and avoiding conflict. Flexibility is required to avoid conflict. Inflexibility leads to defensiveness and rigidity in the bargaining process. Compromise is the key.

3.2.4 Opportunism, Monitoring and Control

Nooteboom et al (1997 p.310) states that, 'traditionally, approaches from economics have focused on the roles of self-interest and opportunism', a problem also highlighted by Loosemore (1999 p.186) above. Where there is a perceived threat of opportunism the means of constraining it have included contracts and monitoring. This behaviour is prominent in many a client's dealings with contractors. The industry is saturated with anecdotes about some contractors who behave opportunistically, and who therefore require careful monitoring. However, it may be argued that this does not amount to out and out distrust, but is in fact a necessary part of managing a successful project. The fact that many in the industry rely heavily on standardised norms, procedures, procurement routes and contracts, backed up by practices referred to by Williamson (1975 p136) as 'Legal Ordering', suggests parties, especially the client, are deliberately distancing themselves from possible vulnerability and therefore any need to rely on trust. In the case of construction, parties are heavily dependent upon constant monitoring, confrontational problem solving, contracts and other legal remedies for conflict resolution, leaving little or no room for goodwill. This provides a legal net of protection against having to, '...increase one's vulnerability to another whose behaviour is not under one's control' (Zand, 1972 p.230). If this is so, then the contractor's ability to convince the client and other associates that it is safe to switch from a focus on the risk and the risk avoidance strategies currently employed toward a focus on confidence-based trust is already seriously impeded.

High levels of perceived risk have led clients and other parties to protect themselves with finger pointing and adversarial practices, and it has been getting worse. This represents a stark contrast to other industries. Deakin et al (1994 p.329) reports on work by others suggesting that in most cases business firms prefer to '...dispense with formal planning and make little recourse to the law to resolve contractual disputes, preferring flexibility as a basis for long-term co-operation' (Macaulay, 1963 p.55; Beale and Dugdale, 1975 p.45). Deakin et al (1994 p.329) go on, 'effective contractual performance rests less upon the strong assertion of legal rights than upon a set of diffuse and open-ended obligations and assumptions which may be summed up in the idea of *Trust*' (Macaulay, 1963 p.58; Beale and Dugdale, 1975 p.47; Campbell and Harris, 1992 p.166; Macneil, 1974 p.780). This is quite the opposite of behaviour in the construction industry. It is as if the construction industry has decided to deal with risk in an entirely different way to other business environments. Rather than managing this in the way experienced and qualified managers might in other industries, they have simply extrapolated the ideas and practices inherent to an 'Engineering Paradigm'. Pries and Janszen (1995 p.42) see this as a form of management originating out of an emphasis on short-term (project) management and technical skills. It is entirely possible that while relying on strict and standardised customs and practices used for solving technical problems, management in construction have failed to grasp the social connotations of human interaction and motivation. Suffice it to say it has a significant impact on a client's willingness to trust others in a building project. In other words, social and behavioural solutions can be utilised to overcome problems posed by cost issues and closely related legal aspects of contracts in construction (Smyth and Thompson, 1999; Smyth, 2000).

3.2.5 Past Experience and Knowledge

Perceived risk is high for clients' when selecting contractors' in what is already an inherently high risk industry. Therefore, understanding confidence-based trust and the role it can play in this decision making process would be *very valuable*. Ali (1994 p.119) asserts that the factors affecting buyer's confidence are:

- Past experience (e.g. clients own experience)
- Past experience of others (e.g. contractors other clients or design team)
- Opinions held by others whom the buyer respects (Colleagues within the firm or like profession)
- Personal assumptions (Own beliefs and attitudes)

These factors can be categorised into three major areas:

- Past personal experience
- Information from a variety of formal and informal sources
- Manipulation of interpersonal relationships

The principles outlined here in association with the model of cyclical market behaviour in chapter two (Figure 2.2) can be applied to the decision making process in the relationship between client and contractor (Figure 3.3 over the page).

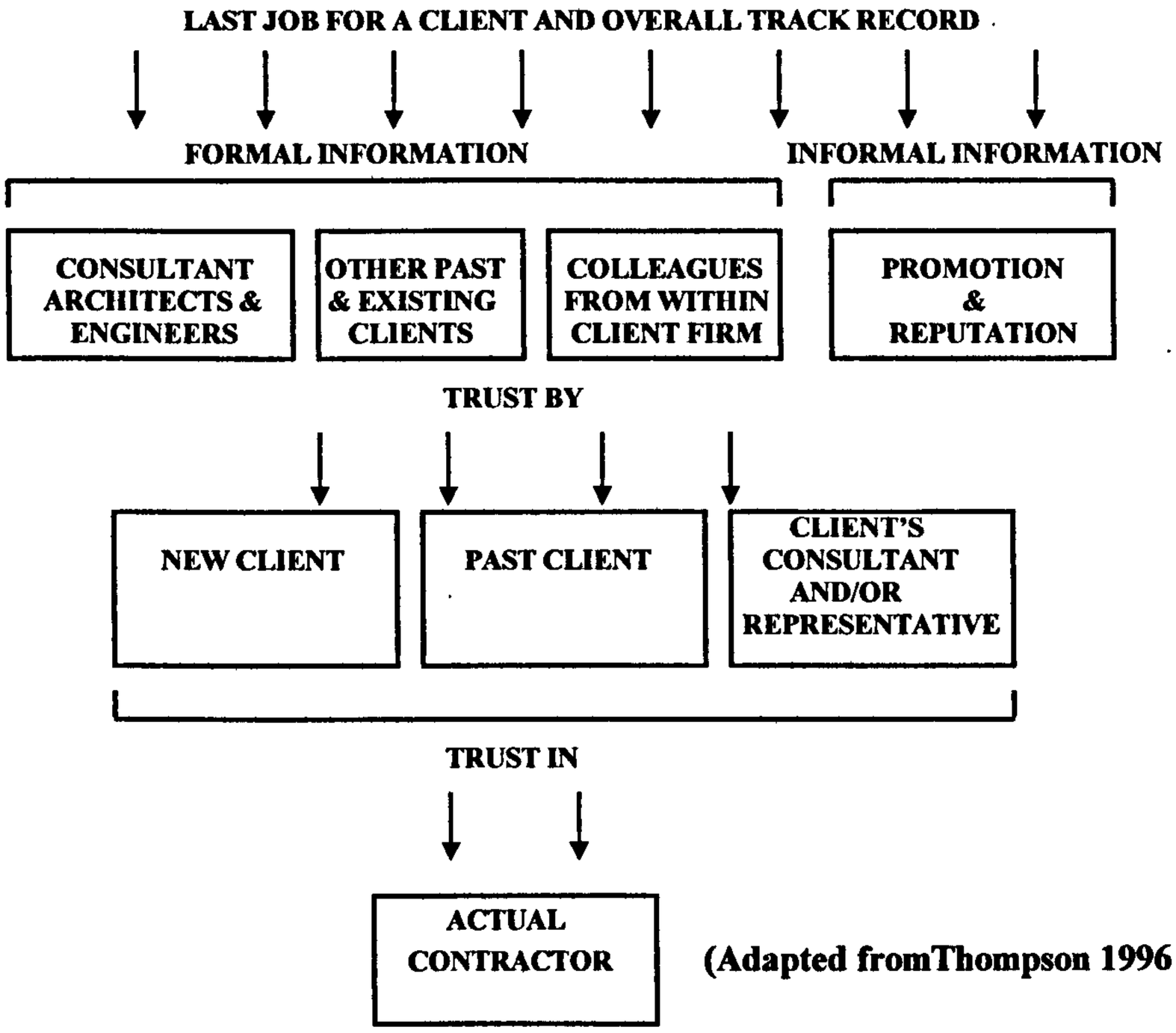
Ali (1994 p.119) illustrates this point with an example:

Acquiring the services of an architect is inherently risky, there is a large amount at stake (cost of a building) and a great deal can go wrong. In this risky purchase the client can nevertheless proceed if the chosen architect is one the client has successfully used before or if the architect has been recommended, by someone the client trusts.

This is compatible with findings by Henthorne et al (1993 p.45) and their study of risk in organisational buying. They state that personal sources of information from within a buying centre had a significant effect on perceived risk where, '...negative opinions increased the level of perceived risk while positive opinions decreased the level of perceived risk'. In communications (of which the sales process and advocates' opinions are two tools) a key construct is source credibility (Giffin, 1967 p.104), defined as, trust of the speaker by the listener (Hovland, Janis and Kelley, 1953 in Giffin, 1967 p.108).

This relates to the role of past clients as positive advocates, bolstering contractors' sales efforts and helping them to establish credibility when trying to develop trust.

Figure 3.3: Trust Derived From Influencer Sources In The Decision-Making Process (Revised).



(Adapted fromThompson 1996 p.88)

(*Note: Promotion includes activity actually undertaken by contractor within the sales process leading up to a decision)

The importance of trust is further reinforced when it is considered that effective services marketing (note that the contractor is selling a service) depends on the management of trust, because the customer (client) typically must buy a service before experiencing it (Berry and Parasuraman, 1991 p.144). It is highly likely that for the potential client in a referral situation, positive advocate behaviour provides that client with positive expectations about a contractor before a sales process starts. This may alleviate some of the perceived risk associated with buying services from a contractor they know nothing about. The literature on trust also suggests that confidence on the part of the trusting party (the client) results from a firm belief that the trustworthy party (contractor) is

reliable and has high integrity (Alterman and Taylor, 1973 p.10; Dwyer and LaGace, 1986 p.40; Larzelere and Huston, 1980 p.595). This is associated with qualities such as:

- **Consistency** (i.e. that the client can expect the same from the contractor as expectations have led them to believe from the advocator, and that this consistency will continue throughout the life of the project).
- **Competency** (i.e. that the contractor's reputation and experience is genuine with regard to what the client is looking for)
- **Honesty and Fairness** (that the contractor will make every effort to satisfy the client and can be trusted not to partake in any opportunistic behaviour, like turning problems into excuses to make claims).
- **Responsible** (the contractor is professional in managing the project and relationship, that the contractor's employees are both trained and motivated toward client focus and satisfaction, and that they recognise and are prepared to solve problems when they arise and before they go too far).
- **Helpful** (in terms of giving constructive advice and overall behaviour).

Anderson and Narus (1990 p.45) focus on the perceived outcomes of trust when they define it as, 'the firm's belief that another company will perform actions that will result in positive outcomes for the firm as well as not take unexpected actions that result in negative outcomes'. Clients should be able to reliably anticipate outcomes from the contractors in whose integrity they have confidence. This confidence would hopefully be expressed both in terms of their willingness to award future contracts to that contractor and willingness to act as advocate, confident that the contractor would not let them down, thus impairing their business performance, or making them appear foolish. The latter point is also relevant to the client consulting team (e.g. architects, engineers, quantity surveyors), whose professional reputation would be at stake. Lastly, in buyer-seller bargaining situations Schurr and Ozanne (1985) find trust to be central to the process of achieving co-operative problem solving and constructive dialogue. Clearly, this is important between clients and contractors during courting, post-tender negotiations and later when solving problems during actual construction.

3.2.6 Reputation and Third Party Influence

The question of whether client mistrust in contractors is justified, or artificially inflated by third parties such as architects and quantity surveyors cannot be ignored. This research may shed some light on the issue. It is possible that third parties pursuing their own interests (e.g. a quantity surveyor or architect legitimising their presence) instil a certain level of perceived risk in clients' perceptions of contractors. In Cherns and Bryant's (1984 p.118) concept of the 'Temporary Multi-organisation' there exists the opportunity for contractors in referral markets, where consultants and other professionals advise clients on which contractors they might use (Thompson, 1996a). After all *reputation* and previous performance have been reported as important criteria for pre-qualifying the contractor (Jennings and Holt, 1998 p.657; Hatush and Skitmore, 1997 p.36; Fellows and Langford, 1993 p.8; Baker and Orsaah, 1985 p.31). According to Fombrun (1996 p.3), 'a reputation embodies the history of other peoples' experiences with that service provider. Good reputation increases credibility, making us more confident that we will get what we are promised'. However, work by Labianca et al (1998 p.55) shows how, 'perceptions of inter-group conflict significantly relate to indirect relationships through friends, which acts toward amplifying the effect'. They argue that where third party relationships exist, 'they will serve to heighten the salience and perception of inter-group conflict for individuals, even if they are not directly involved in the conflict themselves'. Loosemore (1999b p.701), in examining Social Network Analysis (SNA) in organisational power, emphasises how, in receiving and disseminating information to their immediate neighbours in a social network, one party can have control within the project team, in terms of how they choose to monitor and communicate with others. Highlighting the work of Cohen and Marriott (1958) he states (p.701) that people with high centrality act like valves within an organisation and are the glue that binds its differing parts. In essence they are the Gatekeepers, able to manipulate

information flow and thereby exert considerable influence over a decision to benefit themselves'.

- Does this mean that client *trust* in a contractor may be influenced in a similar fashion?
- Can third parties influence trust in the same way other decisions are influenced throughout a project?
- Does this affect clients' trust behaviour toward contractors over and above their own beliefs and attitudes?
- And if so, who are these people who possess this position of centrality where the issue of trust toward a contractor is concerned?

Clearly the work of Labianca et al (1998 p.55) and Loosemore (1999b p.701) suggests that this is important. Furthermore, Hannah (1991 p.11), in investigating trust between client owners, designers and contractors in the US construction industry, also highlights the importance that influence from others can have in the relationship between trust and successful projects.

In chapter one it was shown how contractors' reputations play a large part in them being short listed and even awarded new contracts. Poor reputations therefore clearly influence levels of perceived risk for prospective clients'. The literature review in this chapter revealed a consistent message that to reduce perceived risk it is necessary to build client confidence. The essential point being that there needs to be a move away from risk-based trust toward confidence-based trust, where a contractor wishing and able to develop trust, also reduces perceived risk. This results in less dependence upon the damaging risk-reduction strategies that have been employed in the past by parties to a project, resulting in less adversarial behaviour, thus undermining the conflict culture and allowing better relationships to develop, with a greater chance of a win-win successful project. The contractor's reputation therefore improves with the potential of ultimately providing a means of differentiating their service offering thereby improving their competitive advantage.

3.3 A Review of Methods Used in the Research of Trust

It was not the purpose of this study to develop and validate a new theoretical framework on trust between clients and contractors. The intention is to discover from the literature established tools for researching trust, which would aid understanding of a specifically defined construction marketing/management problem. Past practice dictates that tools from past research can be used to address new research problems whilst at the same time items within those tools can be reworded to fit the context in which they are being applied. Table 3.1 below shows the output from a review of different pieces of research into trust or with trust included.

TABLE 3.1: Review of Methods in the Research of Trust

Author(s) / Style	Objective	Items/Categories	Conclusion
Interpersonal and Close Relationships			
Larzelere and Huston (1980) **Quantitative.**	Development and validation of dyadic trust scale.	Welfare, overall trust, honesty, sincerity, promise-fulfilment, consideration, treatment of other, reliability.	For two-way dyadic use and not all appropriate to this study. Some adaptation possible.
Johnson-George and Swap (1982) **Quantitative.**	Development and validation of scale to assess trust in specific other.	Overall trust, emotional trust, reliability, self-disclosure, co-operation and communication.	Although some points could be adapted, too basic.
Rempel et al (1985) **Quantitative.**	Develop and validate and theoretical model.	Overall trust, predictability, dependability, faith, liking and motivation.	Too basic.
Buyer-seller/Supplier Relationships and Partnerships			
Moorman et al (1992) **Quantitative.**	Developed framework into dynamics of trust within/between org's. Applied to market research agencies.	Trust in researcher, interaction quality, researcher involvement, commitment, research utilisation, user, inter -personal, -org, -department project characteristics.	Somewhat esoteric/specialised. Not possible to sensibly adapt for this project.
Smeltzer (1997) **19 Qualitative Depth Interviews**	Trust enhancing and eroding attributes witnessed by purchasing managers of suppliers.	**Enhancers:** consistency and follow-up, sharing, open communication, mutual respect and honesty. **Eroders:** Dishonesty, lack of commitment to a contract, poor communication, poor attitude and arrogance.	Some very useful constructs, examined usefully in both a positive and negative way. But not enough items, more needed for this research.
Doney and Cannon (1997) **Quantitative**	Development and testing a theoretical framework for antecedents and consequences of trust.	Examined a large number of characteristics to do with supplier, salesperson and relationship. Control variables are delivery performance, price, service, purchase experience, anticipated future interaction.	Too limited to understand complex exchange in construction. However experience of past performance and anticipated future interaction, must be retained in this research.
Marketing Channels and Networks			
Young and Wilkinson (1989) **35 Qualitative Exploratory Interviews**	Understand broader relationship between retailer-supplier / manufacturer-distributor.	Limited focus on trust.	Lacks strong conclusive results on trust. No clear indication of how interviews were executed and analysed.
Anderson and Weitz (1989) **Quantitative**	Impact trust has in conventional industrial channel dyads.	Limited definition of trust centred a round fairness. Some links drawn with goal congruency, communication, and competency. Poor reputation and power imbalance stifle trust.	Too basic for this research however findings can be used in comparative discussion later.

Co-operation and Commitment			
McAllister (1995) **Quantitative**	Developed/tested framework. Interpersonal trust among managers & professionals in org's.	Affective and cognitive aspects in trust.	Designed to focus on cross-functional dyadic relationships. Inappropriate for this research project.
Morgan and Hunt (1994) **Quantitative**	Develop and tested framework. How trust & Commitment aid RM strategies.	Values, communication, cooperation, conflict, uncertainty, opportunistic behaviour.	Designed to address both commitment and trust in RM. Not trust specifically. Exceeds focus of this research.
Geyskens and Steenkamp (1995) **Quantitative**	Tested hypotheses concerning joint effects of trust & inter-dependence on relationship commitment	Trust defined in terms of honesty and benevolence.	Conceptualisation of trust to limited as is only subcomponent of a study with wider remit.
Decision-making Teams and Organisational Boundary Role Persons			
Korsgaard (1995) **Qualitative Training Sessions**	Decision-making and attitudes for co-operative relations in decision-making teams.	Narrow definition of trust revolving around respect for ideas, participation, confidence, treatment of others.	By no means comprehensive enough. However supports the notion of confidence-based trust and the need to actively involve team members in discussion.
Curral and Judge (1995) **Qualitative depth interviews followed by a Quantitative survey**	Inter- organisational relationships. Trust between individuals who provide linking mechanisms across org's. Boundary Role person's.	Interestingly uses an already tried and tested model relating to behaviour in other areas and is applied to trust in relationships. 'Theory of Reasoned Action' (Ajzen and Fishbein, 1980). Allows for multidimensionality of trust construct. Can be adapted to include both trusting and non-trusting behavioural consequences. Also allows profiling of third party influence.	This possesses a number of attributes which whilst by itself cannot cover all aspects of trust needed in this study, can usefully aid understanding clients willingness to trust or not, of third party influence from within the TMO, and for risk and confidence based consequences of trusting. Also has a successful track record.
Components, Properties or Conditions of Trust			
Kaplan (1973) **Qualitative**	Reviews the 'Rotter Trust Scale'. Applied to interpersonal trust.	Composed of several factors, with 25 items against 5-point Likert-scales.	Would have problems with applicability to construction. Kaplan (1973 p.14) and Rotter (1967) recognise complexity of trust and the need for several dimensions. However, scales remain limited.
Hwang and Burgers (1997) **Quantitative**	Introducing a simple analytical model (p.67).	Lacks satisfactory explanation as to what trust is. Never adequately defined, some properties of trust are presented relating to co-operation, risk, fear and how the existence of trust can reconcile or even eliminate these.	The link between reducing risk or fear in relationships through trust is a useful one for discussion purposes. However the tool is inappropriate for this study.
Butler 1991 **Qualitative and Quantitative**	Developed and validated a clear, multi-dimensional inventory of 10 Conditions of Trust.	Conditions include, availability, competence, consistency, discreetness, fairness, integrity, loyalty, openness, promise-fulfilment and receptivity. Each set against 4 items measured through 5-point Likert-scales.	This so far presents the most comprehensive and relevant set of constructs for understanding how one parties behaviour influences trust development in another. Literature is also clear about how its was developed and can be executed in other studies. (This said see below)
Peters and Fletcher (1997) **Quantitative**	Utilises the already existent CTI model developed by Butler (1991) above.	Includes a majority of the categories listed above. Reference is also made to past experience, stating, 'if trust is violated on one transaction, it may well be disrupted in related transactions'. 'Reliance on trust between business partners will emerge only when they have successfully completed a transaction in the past' (p.527).	Clearly demonstrates its adaptability to different types of relationship scenario. Something none of the other models developed and validated, have been demonstrated to be able to do.
Hannah (1991) **Quantitative**	Application of CTI to the triadic relationship of constructor, client and designer in the US construction industry.	Successfully used all ten conditions of trust listed above.	This seems to seal it. Successfully applied to the complex US Construction industry it maps out how behaviour influences trust, and can be used to assess past experience of a service provider. Most likely need to be used in conjunction with another model.

Developments Since Field Work			
Michell et al (1998) **Quantitative**	Explored the foundation of trust behaviour Carried out using middle and junior managers and clerical personnel from six well known companies, across banking, retailing and manufacturing.	A comprehensive set of variables, were contained within four dimensions: **Probity:** confidence, truthfulness, integrity, professionalism, and reputation. **Equity:** fairness, benevolence, caring, values, sincerity and helpful advertising. **Reliability:** warranties, dependability, quality consistency, quality standing, predictability, corporate name guarantee. **Satisfaction:** personal experience, opinion, purchasing duration, experience of peers, and delivery.	Possessing a high number of variables. Provides strong exploratory power. This was the first time a model was developed specifically, to help understand trust in firms overall, rather than in individuals interpersonal trust. If published at the time of designing method, this may have been the preferred choice, as it may have negated the need to combine other models.
Swan et al (1999) **Qualitative Meta-analysis of Empirical Literature**	Meta-analysis of empirical literature on the antecedents and consequences of trust in a sales context.	Re-occurring constructs include; benevolence, competence, sales person behaviour, satisfaction, attitudes, future intentions and buyer behaviour.	Limited in areas, it confirms aspects of the methods chosen for this research. Notably, attitude, intention and behaviour. Authors highlighted areas they considered underdeveloped to include: Trust and risk, Trust and suspicion, Trust as cognition and affect. However, given the scant amount of work done on trust in construction, this renders a meta-analysis or literature for this project inappropriate.
Wong et al (2000) **Quantitative**	The role and nature of trust within three Singaporean public sector construction management agencies.	Using a survey questionnaire sent to 290 professionals (architects, engineers, quantity surveyors). Concluded that only three antecedents causally relate to trust (results, integrity and concern).	Considered too basic for the complex exchange that goes on between clients and contractors, it also doesn't address large private client perspectives in the UK.
Woodward and Woodward (2001) **Qualitative - Case**	Break down of trust between managers and subordinates	Trust building skills needed, monitoring, company culture, between directors and site management	In construction. Just one company's experience with trust. Non- generalsable.

From the literature review on trust methodologies it was clear that no one framework would cover all the issues identified in chapter three. Most notably Ali's (1994 p.119), factors affecting buyer confidence:

1. Past experience (e.g. clients own experience)
2. Past experience of others (e.g. contractors other clients or design team etc.)
3. Opinions held by others whom buyer respects (Colleagues within firm or profession)
4. Personal assumptions (Own beliefs and attitudes)

In order to be able to effectively research all of these areas, two frameworks from the literature had to be brought together. The two most viable options for this were, Ajzen and Fishbein's (1980) 'Reasoned Action Model' (RAM) which will be able to address points 2 to 4 above, and Butler's (1991) Conditions of Trust Inventory (CTI), which is suited to addressing the very important and complex point 1 on 'Past Experience'.

3.4 Summary and Definition of Client Trust of Contractors in Construction

This summary is drawn from the many definitions of trust presented in this chapter (Sections 3.1.1 to 3.1.4). Consideration has been given to the complexity and uncertainty of the exchange relationship, experienced by clients and contractors within the private building sector of the UK construction industry (Sections 3.2 to 3.2.6). The following is a definition of trust required by clients if positive long-term relationships such as those outlined in chapter 2 are to succeed. Essential client trust in contractors might therefore be defined in three points, as;

- **willing behavioural reliance upon a contractor, under conditions of reduced control,**
- **the contractor having earned the client's confidence in their word, ability and motivation, to carry out actions as agreed to the best of their ability,**
- **avoiding unfair opportunistic behaviour against the client, under complex conditions of uncertainty.**

Achieving this may appear highly improbable given the problems outlined (Section 3.2) as undermining the effective development of clients' confidence-based trust in the industry. Determining this requires research that utilises a complex multi-attribute model that assesses, client behaviour, attitudes and cognisance of consequences about trusting the contractor whilst allowing for the complex nature of the exchange process experienced within Cherns and Bryant's (1984 p.118), Temporary Multi-organisation. As the analysis in Section 3.3 (above) shows 'Reasoned Action' when combined with 'Conditions of Trust Inventory' provides the best solution. Chapter four unfolds in more detail how these two frameworks are designed and work for research purposes.

CHAPTER FOUR

Introducing Attitude Measurement, Reasoned Action and the Conditions of Trust Inventory

4.0 Introduction

A review of different methodological approaches used in the research of trust was carried out (Table 3.1- Section 3.3). The net result of this was the identification of two frameworks for use in this study. They were Ajzen and Fishbein's (1980 p.100) 'Reasoned Action Model' (RAM) and Butler's (1991) 'Conditions of Trust Inventory' (CTI). The two models developed independently of one another are integrated into one model in order to aid understanding and explanation of current trust behaviour (or lack of it) by client decision-makers toward contractor organisations.

This chapter explains the mechanics of these models for the purposes of this research. The chapter examines attitudinal research and earlier work surrounding 'Expectancy Value' models designed to aid understanding of attitudes and behaviour. It moves on to examine the development of 'Reasoned Action' and how the effect of 'attitudes' and 'social normative' influences impact on decision-making and behaviour. The chapter ends by introducing Butler's Conditions of Trust Inventory (CTI), which will be used to understand clients' past experience of contractors' trust 'evolving' and 'eroding' behaviour during earlier projects. CTI also provides a measurement for reported past trust experience. In examining the above, this chapter defines what is researchable behaviour and examines the appropriateness of Reasoned Action to this research. But before this, an examination of research paradigms is made, as part of the explanation underpinning methodological choices that have been made.

4.1 Methodological Orientation and Paradigms in this Research

This section provides insight into the overall orientation of this research. Essentially a **deductive** approach, the intention is to accept or reject hypotheses (Chapter 1 and 5), using a combination of tried and tested models (Chapter 3 and 4) in a new situation. Using a combination of **qualitative** (Semi-structured depth interviews) and **quantitative** tools (questionnaire survey), the approach falls between the pure **positivist** position on one hand and the **interpretive** on the other.

The **positivist** approaches problems as would a natural scientist, using quantitative methods whilst seeking to test hypotheses set up in advance of data collection according to criteria also determined before the study begins (Section 5.6 - Chapter 5). Considered to be, more intimately related to **deductive** reasoning, it has three characteristics (Keat & Urry 1975). They are:

(i) That for the social sciences to advance, they must follow the hypothetico-deductive methodology used, with such evident success by natural scientists (e.g. physicists) - the experimental method.

(ii) The knowledge produced and the explanations used in social science should be the same as those proffered by the natural sciences, - e.g:

A causes B

or

Variation in A causes Variation in B

that is

Stimulus A causes Response B

(iii) The above entails social scientists treating their subject matter, the social world, as if it were the same as the natural world of the natural scientist.'

However, this is not altogether possible. This research will endeavour to remain as detached, neutral, and objective as possible whilst measuring client decision-makers' trust toward contractors (Neuman 1997 p.67). However, what must be made clear is that social behaviour operates in a complex environment of influences and change. Therefore, in all practical common sense, precise measurement of a social world under observation is simply not possible. It is hear that an interpretive perspective is helpful.

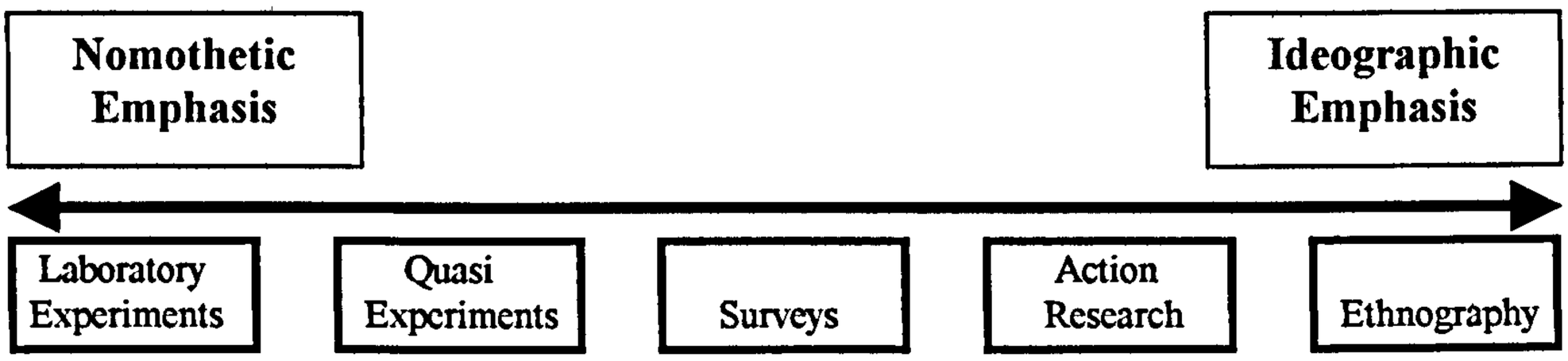
'The **interpretive** perspective, which utilises a more qualitative, ethnographic or semiotic approach to research, is more closely related to **inductive** reasoning. 'Still rigorous, neutral and non-interventionist it takes into account the subjective dimension of human activity - the internal logic and interpretive processes by which action is created' (Kent 1993 p.11).

'For interpretive researchers, the goal of social research is to develop and understanding of social life and discover how people construct meaning in natural settings' (Neuman 1997, p.68-69). 'The researcher wants to learn what is meaningful or relevant to the people being studied' and '...does this by getting to know a particular social setting and seeing it from the point of view of those in it'.

Furthermore, this research does not examine behaviours, which are external, observable, physical and objective (e.g. eating, sleeping and reflex actions). This is particularly poignant with regards this research project. The Interpretive element within this research also focuses on social action with which people attach subjective meaning (e.g. Love for, fear of and feeling toward an object, group or other person). 'People possess an internally experienced sense of reality'. 'This subjective sense of reality is crucial to grasp human social life' (Neuman 1997, p.69). The trust experienced between clients and their contractors represents precisely one of those internal and subjective experiences. This makes the inclusion of an interpretive perspective crucial to this research. However, included within this research will be items of consequence related to trusting behaviour (Smeltzer, 1997; Brock Smith and Barclay, 1995). These will act as supporting indicators as to whether trusting behaviour exists or not (See **Hypothesis 3** and Section 4.3.1 – Defining Researchable Behaviour).

Clearly a balance must be struck between the two orientations. This is helped in part by Gill and Johnson (1991 p.36), who describe a heuristic device in the form of a continuum of research methodologies, in terms of their various logics (orientations) (Figure 4.1 – below).

Figure 4.1: Heuristic Continuum of Research Methods According to Orientation



At one end a nomothetic emphasis, an 'approach to social science that seeks to construct a deductively tested set of general theories that explain and predict human behaviour'. At the opposite end, an ideographic emphasis, 'an approach to social science that emphasises that explanation of human behaviour is possible'. Surveys fall into the middle ground and therefore it is intended that there be both a positivist and interpretive influence in this research. This means that from a purest positivist perspective results are highly likely to be relatively moderate compared to those experienced in a laboratory. However, as the remainder of this chapter will show this research will work within parameters considered perfectly respectable in terms of management, marketing or social science (Section 5.6).

The remainder of this chapter and chapter 5 following this section outlines the mechanics of the fieldwork methodology to be used in this research. To conclude Gill and Johnson (1991 p.75) state that, 'much survey research may begin with an unstructured and exploratory investigation...', 'thus theory is developed inductively to be tested later using a more structured questionnaire as part of the main study'. Ghauri et al (1995 p.10), in examining inductive and deductive reasoning, highlight how most

researchers and scientists will tend to use both in their research. As will be seen, fieldwork has been divided into stages. The first being a series of semi-structured in-depth interviews (Ghauri et al 1995 p.86) designed specifically with the purpose of gaining insight and understanding into the perceptions and language used by respondents on the issues under investigation. This is qualitative and primarily interpretive in nature. The second stage involves a survey, and seeks to gain some measure of respondents views towards the issues that have been more clearly defined as a result of stage one. This is quantitative and somewhat more positivist in nature (p.86). Thus, a balance is struck between the two orientations.

4.2 Attitude Measurement and the Expectancy-value Model

According to Rokeach (1969 p.26), 'An attitude is a relatively enduring organisation of interrelated beliefs, that describe, evaluate and advocate action with respect to an object or situation, with each belief having cognitive, affective and behavioural components. Each of these beliefs is a predisposition that, when suitably activated, results in some preferential response toward the attitude 'object or situation', or toward the maintenance or preservation of the attitude itself. Since an attitude object must be encountered within a situation about which we have an attitude, a minimum condition for social behaviour is activation of at least two interacting components. 'One concerns the attitude object and the other concerning the situation'. In this case, attitude object would be willingness to trust a contractor and the situation, working with them throughout a project.

Reasoned Action Theory, is an extension of Fishbein and Ajzen's (1975) earlier work on the 'Expectancy-value Model' for attitude, which was designed to measure issues raised by writers like Rokeach (1969 p.26). However, Ajzen and Fishbien (1980 p.5) have

developed the theory further, focusing upon 'Rational Volitional Behaviour' - that is to say behaviours over which the individual has control. According to Fishbein and Ajzen (1980 p.5), 'people consider the implications of their actions before they decide to engage or not engage in a given behaviour'. This is in-line with Rokeach (1969 p.26) above. Work on 'Expectancy-value Theory' (Fishbein 1963 p.233) set out to measure this process using semantic differential scaling. Developed further by Ajzen and Fishbein (1980 p.7) who argued that beliefs pertain not to behaviour itself but rather the expected outcomes of carrying out such behaviour. This is reiterated by East (1992 p.169) whilst referring to Ajzen (1985), in his work on 'Planned Behaviour' which introduced a further modification to the 'Reasoned Action Model'. Focusing on expected outcomes represents an important distinction from just focusing on the behaviour itself. It introduces the element of consequence in the mind of the person and their attitude toward carrying out a specific behaviour. Consequences that may present inherent risks. This is particularly appropriate to this project where the idea of clients trusting a contractor in the construction industry has been shown in the chapter 3 to be treated with scepticism, seen as an unrealistic and high risk thing to do.

4.3 The Reasoned Action Model

Reasoned Action went further, by allowing for the outside influences of third parties. This modification to the original 'Expectancy Value Theory', created the distinguishing feature between 'Reasoned Action Theory' and the original 'Expectancy-Value Theory' by including a 'Social Normative' section to the model. With this the, 'ultimate goal is to *predict* and *understand* an individuals behaviour' (Ajzen and Fishbein, 1980 p.5) by taking into consideration a persons beliefs about the outcome of executing such a behaviour while considering what other people or organisations think they should do. At this point it should be noted, that on this occasion, it is not the purpose of this research

to predict future client behaviour or outcomes. Rather, the aim is to understand current trust behaviour, or lack of it, and in the process discover why.

Such understanding can help contractors' to improve their approach with to influencing future client behaviour and outcomes. For the purpose of this research the methodology is used to find out where change in practice can help, not predict, behaviour. This is facilitated by a further modification to the model that allows clients' own past experiences to be taken into account. It has already been shown in chapter 2 that this would impact on future expectations and thus behavioural intention. In using the model in this way to help understand current behaviour the theory can prove very useful. However, before these points are developed further the term 'behaviour' is defined.

4.3.1 Defining Researchable Behaviour

Researching behaviour is not straightforward. In examining social behaviour certain things need to be considered in order to establish the boundaries under which the research is taking place, the answers to which establish how practical it is to research the behaviour in question. Firstly, the focus of this research is 'Reasoned' not 'Automatic' behaviour (e.g. falling asleep, the digestive process or adrenaline induced emotions). There is the assumption that human beings, being reasonably rational, tend to make systematic use of information available to them (Ajzen and Fishbein, 1980 p.5). Furthermore, many people faced with making decisions in construction management environment are far from capricious or thoughtless when doing so, choosing to be very practical, specific and structured in their thoughts about problems and the decisions that are made. These views subscribe to those recommended by Ajzen and Fishbein (1980 p.5) when utilising the Reasoned Action Model (RAM).

Secondly, can the behaviour under scrutiny be adequately conceptualised? Can we form some semblance of idea in our minds of ourselves carrying out the behaviour? This is difficult. It should be noted that not all behaviour that can be conceptualised is openly identifiable. Behaviour as an observable phenomenon varies in extremes of tangibility. To drive a car or buy an apple is a behaviour that is easily observed. However, trusting someone is more subjective, internally rationalised and often implied. To trust or give one's trust is simply a decision, which can go one way or another. As discussed in Chapter 3 in order to conceptualise trust as behaviour, two things need to be present:

1. An awareness that by actually trusting someone or something there will be *consequences.* Something, Reasoned Action is specifically designed to take into account, unlike other types of attitudinal study.
2. That upon trusting someone or something, *actions* will be taken that leave the party giving their trust exposed to those possible consequences.

Tuck (1976 p.83), tells us that with, 'any act it is possible to conceptualise, any intention it is possible to form, will have some beliefs about consequences or associations attached to it'. This means if we can form an idea in our minds of what it would be to carry out the behaviour and bear in the mind the consequences or associations attached to it, there exists a behaviour that can be realistically pinned down for research. Reasoned Action Theory has been applied to wide variety of behavioural research issues both identifiable (Sheppard et al, 1988 p.332) and implied (Chang, 1998 p.1825; Currall and Judge, 1995 p.151) and found to work. Combining the views of Tuck (1976 p.83) with the work of Brock-Smith and Barclay (1995 p10) and Smeltzer (1997 p.42-43), introduced earlier (Section 3.1.3), supports the idea that trust can be viewed as a behaviour capable of being understood using Reasoned Action.

4.3.2 Appropriateness of the Reasoned Action Model

Of course the model is not, without its weaknesses. Sampson and Harris (1970 p.145) doubt that 'behavioural intention' is a satisfactory surrogate for behaviour. In the case of

consumers, purchasing a product there is likely to be low involvement with the object in question and therefore consumers are likely to have weakly held views on which to base attitudes and intentions, with the danger that the stated intentions will be unstable. However, it has been shown in construction how the level of client involvement with contractors and other referent parties to a building project are considerably greater when compared to other types of buyer markets (Section 2.2). Furthermore, Sheppard et al (1988 p.336) has shown through a meta-analysis of some 87 separate studies where the Reasoned Action Model had been used, with a total sample of 11,566, that Behavioural Intention is a good predictor of behaviour. Sampson and Harris (1970 p.165) go on to conclude that the model may be best suited to what they describe as the high interest domain (High Involvement). Therefore, it should be suited to studying complex client decision-making on trust and behavioural intention toward trusting a contractor. In fact, the 'Reasoned Action Model', and variations on it such as 'Planned Behaviour' (Ajzen, 1991), have been extensively used for research in other areas and the evidence has been supportive. Many researchers have found the theories to be valid and highly robust in a variety of applications (Wilson et al, 1975; Tuck, 1973; Bonfield, 1974; Cowling,1972; Ryan & Bonfield, 1980; Charng, Piliavin and Callero, 1988; Sheppard et al, 1988; Sparks & Shepherd, 1992; East, 1993).

Another issue concerning the applicability of this theory arises from the point made earlier about the possible problem of *prediction*. To demonstrate a successful prediction of behaviour it would be necessary to carry out a follow up study to establish whether or not people acted as they said they would. However, in examining client's trust behaviour toward contractors in this research project, certain issues make this difficult. It has already been shown how trust is an implied behaviour. In order to show that trust had occurred clients would need to demonstrate actions that were indicative of the

existence of trust behaviour (Brock-Smith and Barclay, 1995 p10; Smeltzer, 1997 p.42-43). This would be difficult to show in a study such as this. For example, a client awarding another contract to a contractor does not prove they trust the contractor, and the client simply saying that they do trust is arguably a weak confirmation of trust behaviour. A follow-up study might pose a series of questions relating to the outcomes of trust in the contractor and test for internal consistency. However, whilst most clients could easily reflect upon recent contractor behaviour as a past experience, client requirements for future project work in terms of timing and need for a specific contractor in future, amongst other reasons, make obtaining sensible feedback in a follow-up from all the original participating respondents virtually impossible. Furthermore, while original data can be obtained from all respondents reflecting on the last contractor they used, the likelihood of all the clients using the same contractors again, for similar type work, within a sensible time horizon, is negligible. This is why using the Theory of Reasoned Action for the prediction of trust behaviour in these circumstances is unrealistic. Instead a measure of reported trust behaviour by the clients from a past contract could be used in place of a follow-up measure of trust. Hence the importance of including a past experience element to this research. Kashima and Gallois (1994 p.207) say, 'the Theory of Reasoned Action has been used successfully for both applied and basic research into the determinants of many social behaviours. With its elegant theoretical formulation and methodology, Reasoned Action has been especially popular for problem orientated research designed to produce policy recommendations and interventions'. From this, it can be concluded that the main methodological benefit is to improve behavioural outcomes to the mutual advantage of clients and contractors, not to predict future outcomes. Therefore, a measure of past experience reporting past trust behaviour would suffice in order to understand current trust behaviour by client decision-makers toward contractors. Thus, according to Fishbein and Ajzen (1980 p.5),

'people consider the implications of their actions before they decide to engage or not engage in a given behaviour', and that this model helps researchers to *understand* this. Instead of predicting future behaviour based purely upon Reasoned Action's internal attitudinal element and external normative element, the model might be used to understand current behaviour with regard to trust toward a contractor, while including a *past experience* modification.

In construction, trust is certainly seen as a problem by many. A modified Reasoned Action Model may well help to see why. From a contractor's point of view this would prove useful because it provides a better understanding of the influences acting upon client behaviour toward the contractor. It therefore affords contractor companies an insight into how to approach clients, invest in client relationships, and how trust influencing behaviour might be improved. As already argued, in order to do this the model would have to be augmented in order to allow for clients past experience and hindsight. This requires a further discussion into the components of the Reasoned Action Model (RAM) and how the model actually works.

4.3.3 Components of the 'Reasoned Action Model'

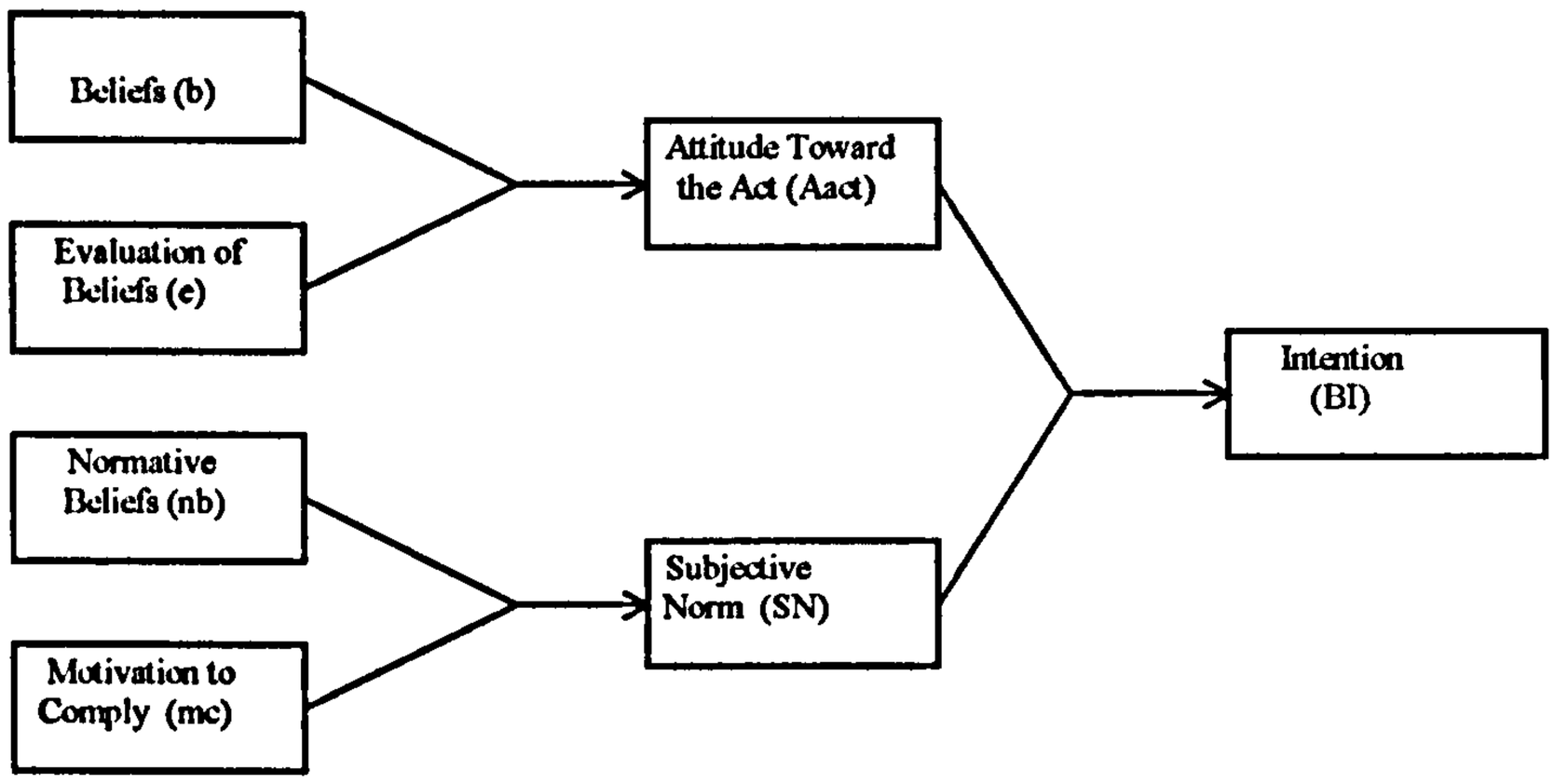
A schematic representation of the Theory of Reasoned Action is shown below (Figure 4.1 – over the page). The model has seven sections, which reduce clients' 'Behavioural Intention' down into two broad streams. They are the internal (attitudinal) and external (normative) streams. The attitudinal stream comprises of the 'Attitude Toward the Act' (Aact), Beliefs (b) and Evaluation of Beliefs (e) sections of the model. The normative stream comprises of the Subjective Norm (SN), Normative Beliefs (nb) and Motivation to Comply (mc) sections of the model.

Where behaviour, or B, has been suitably conceptualised for research, BI is the Behavioural Intention to perform that behaviour. This is a product of A_{act} or the attitude toward performing that behaviour B and SN, the subjective norm; w_1 and w_2 are empirically determined weights.

$$B \sim BI = w_1 A_{act} + w_2 SN$$

This is illustrated below with the A_{act} and SN boxes leading into the BI box.

Figure 4.2: A Schematic Representation of the Theory of Reasoned Action.



Miniard and Cohen (1981) inform us that, A_{act} is the actor's attitude toward performing the behaviour. This is arrived at in accordance with Ajzen and Fishbein's (1975) earlier work on Expectancy-Value formulation (Section 4.1).

Miniard and Cohen (1981) state, 'a person's attitude toward a specific behaviour is proposed to be a function of the salient beliefs about the relevant attributes and perceived consequences of performing the behaviour and of the person's evaluation of these attributes and consequences':

$$A_{act} = \sum_{i=1}^{n} b_i \, e_i$$

where *b* is the belief that a given consequence or outcome *i* will occur should the behaviour be executed, *e* is the person's evaluation of that outcome *i;* and *n* is the

number of salient beliefs the person holds about performing behaviour B. This part of the model is multiplicative.

The addition of a second component is critical. Again, as mentioned earlier, Subjective Norm, or SN, turns Expectancy-Value into Reasoned Action Theory. This consists of an actor's perception of what specific referent individuals or groups, who are important to the actor, think he/she should do and his/her motivation to comply with these referents. This is a critical addition to the model for the purpose of this research, as clients undeniably operate within what has been termed the 'Temporary Multi-organisation' (Cherns and Bryant, 1984 p.181). They are therefore constantly subject to the opinion of others, who may represent an important influence on the client's decision making:

$$SN = \sum_{i=1}^{n} NB_i \; MC_i$$

Here NB stands for normative beliefs, the clients 'beliefs about who they think other persons or agencies think are' (East, 1990 p.86). Miniard and Cohen (1981 p.311) describe it as 'the person's belief that reference group or individual *i* thinks he/she should or should not perform the behaviour'. Ajzen and Fishbein (1980 p.6) talk about, 'a person's (the client) perception of the social pressures put on them to perform the behaviour in question'. It is worth noting that no distinction is drawn between individuals or organisations as the source of influence. Furthermore, there is nothing to suggest that the term *agency* and *group* cannot be interpreted to include regulatory bodies (e.g. government), professional organisations (e.g. CIOB, ICE or CIBSE) and companies, each of which may represent their own overall image or have an established policy on the behaviour in question. MC is the person's (client's) general motivation to comply with referent *i*, and *n* is the number of relevant referents. This part of the model is also multiplicative.

The formula outlined above demonstrates the associations each part of the Reasoned Action Model has with another. The seven key model sections prescribe the necessary sections required within a questionnaire. The required structure of the questions in turn directs what is required from the fieldwork. The method of analysis for data derived from the questionnaire survey prescribed by practitioners and writers is Multiple-Linear Regression and Pearson's Correlation Coefficients (Raats, 1992 p.68; East, 1990 p.89; Miniard and Cohen, 1981 p.326; Ajzen and Fishbein, 1980 p.99; Tuck, 1976 p.79).

In social sciences the measuring of attitudes has been long understood to require some mechanism allowing for differing degrees of opinion by respondents. Eagly and Chaiken (1993 p.32) refer to the work of Thurstone (1928) and Thurstone and Chave (1929), which clearly highlighted the importance of differing degrees of favourableness or unfavourableness toward an attitude object. Eagly and Chaiken (1993 p.32) state, 'This work marked the first applications of formal scaling methods to the measurement of attitudes'. They developed techniques that would allow respondents to specify location of their opinions along appropriate evaluative continuums (Ajzen and Fishbein, 1980 p.14). Likert (1932 p.5) later proposed a simplified method of scaling, which has been widely adopted. It had been suggested that analysis of data be undertaken using Logistic Regression. However, this would require the reduction of scaled data down to a (0, 1) binomial, which in itself contravenes the essential requirement for scaled data. This would present problems that are beyond the scope of this work.

4.4 Modifying Reasoned Action to Allow for Past Experience: Introducing Butler's Conditions of Trust Inventory (CTI)

'Since the inception of the Ajzen and Fishbein (1980 p.100) model, many researchers have argued that the predictive power of the model can be increased significantly with the inclusion of several new parameters' (Towler and Sheppard, 1991 p.38). It is not

unreasonable to expect that if the *predictive* function of the model can be improved, through modification, then surely, so can the *understanding* function. As stated earlier it is the latter of these two functions that this research wishes to draw upon. Previous modifications have been with measures for variables like 'Habit' (Towler and Sheppard, 1991 p. 37; Ronis and Kaiser, 1989 p.213) or 'Perceived Control' (Ajzen, 1991 p.179; Schifter and Ajzen, 1985 p.843). Towler and Sheppard (1991 p.38) highlight the work of Bentler and Speckart (1979) saying, 'Past Behaviour, has been found to be an important predictor of intention or future behaviour, independent of the components of the theory of reasoned action'. More significantly (East, 1997 p.155) talks about the effect 'Past Experience' can play. He highlights the work of Fazio (1986 and 1990) stating, 'attitudes learned through experience are more accessible and this suggests that the connections between global variables and both intention and behaviour will be stronger among more experienced people'. East (1997 p.122) also reflects on work by Fazio and Zanna (1981) who, 'find that evidence generally supports the view that direct experience of an object leads to more strongly learned associations between attitude and behaviour. That is, the association of attitude with action is more predictable and consistent, when the attitude has been formed through direct experience'. 'It seems clear that past experience often has an effect which is not mediated by the concepts of reasoned action theory. Through experience we learn to respond to stimuli...(East 1990 p.108)'. 'Through experience people learn about their abilities and the opportunities that they have and these may not be fully measured by Aact and SN' (p.109).

It has been shown different components within the Reasoned Action Model can be combined to determine overall behavioural intention a client has toward trusting their contractor. Butler's Conditions of Trust Inventory (CTI) is intended to provide a component that allows for clients' own past experience. In addition, scales are included

within the questionnaire pertaining to level of budgets controlled by the decision-makers over a three year period. Lower-level budgets being indicative of less experience compared to high-level budgets. The key questions for this section are:

1. How should the modification be designed for effective implementation of CTI into the Reasoned Action Model?
2. How would Butler's (CTI) be used to determine clients' own past experience of contractors in terms of their trust relationship?

Butler's (1991) 'Conditions of Trust Inventory Process' sets out to provide an instrument for extracting and compiling a list of trust conditions for measuring purposes. This is combined with already existing elicitation methods as commonly prescribed in the Reasoned Action literature (East, 1993 p.72, Ajzen and Fishbein, 1980 p.62 *ff.* Tuck, 1976 p.77), and thus can be carried out simultaneously with the in-depth interviews and questionnaire survey. Figure 4.2 (over the page), illustrates how Ajzen and Fishbein's model will be modified to facilitate the CTI theory into the overall operation of the model.

It is proposed that by combining key elements of the 'Theory of Reasoned Action' with Butler's 'Conditions of Trust Inventory' it will be possible to gain insight and understanding into the current role trust plays in the decision making process between clients, named advocates and contractors when awarding contracts. In short, extraction of attitudes, consequential beliefs and salient referents for implementation into a Reasoned Action Model will be undertaken simultaneously in interviews with identification of 'Trust Conditions' representing clients' past experience.

BI (Behavioural Intention to perform that behaviour) is a product of A_{act}, attitude toward performing that behaviour (B); SN, the subjective norm and PE, Past Experience; w_1 and w_2 are empirically determined weights.

$$B \sim BI = w_1 A_{act} + w_2 SN + PE$$

This is illustrated above with the A_{act} , SN and PE boxes leading into the BI box. The ten conditions of trust categories exist as introduced in chapter 4. They are:

1. Availability
2. Competence
3. Consistency
4. Discreetness
5. Fairness
6. Integrity
7. Loyalty
8. Openness
9. Promise-fulfilment
10. Receptivity

Figure 4.3: A Schematic Representation of the Modified Reasoned Action Model.

(BI = behavioural intention; Aact = attitude toward the act; SN = subjective norm; PE = items making up overall measure of reported trust past experience; b = beliefs; e = evaluation of beliefs; nb = normative beliefs; mc = motivation to comply; CTI = Items grouped under each condition of trust inventory category).

These will be used to represent 10 areas of contractor behaviour recently experienced by a client. Each category contains four items measured against five-point Likert-scales. The wording of these items will need to be adapted to suit circumstances experienced by clients. This will require a process of validation executed through depth interviews with key client decision-makers. Once suitable criteria has been identified they will be implemented into the design of a questionnaire along with criteria required for the reasoned action model. Each category (made up of four items) will have one 'mistrust' item, the purpose of which will be to test the internal consistency of responses given to the other, positively worded items. The eleventh category, 'Overall Trust', is included to

enable researchers to test the relationship of each of the ten condition categories (CTI) against an overall measure of reported past trust behaviour (PE):

$$PE = \sum CTI_i$$

where CTI represents each condition category and *i* will occur should each item within each category be found to be valid. This part of the model is correlative.

4.5 Summary

A review of research methods used to understand trust revealed the Reasoned Action Model (RAM) and Butler's Conditions of Trust Inventory (CTI). The modification of RAM to include CTI within its structure provides a suitable overall model for addressing the trust within the highly complex exchange process experienced by clients and contractors within Cherns and Bryant's (1984 p.181) Temporary Multi-organisation. The combined contribution of the two models allows this study to tackle client trust as defined earlier (Section 3.4), whilst revealing consequential beliefs associated with clients' expectations based on level of confidence (Figure 3.1). It also allows for the very important aspect of third party influence that exists as a result of the complex exchange process experienced by clients and contractors having to work within the Temporary Multi-organisation (TMO). The modified model also complies with all of Ali's (1994 p.119) factors for understanding buyer (client) confidence. It therefore addresses the dynamics of relationships between clients and contractors within the TMO whilst also aiding understanding of trust in a relationship marketing context as applied to project working environments. The next chapter goes through the step-by-step process for executing these methods in the field.

CHAPTER FIVE:

Research Methodology

5.0 Introduction

Ghauri et al. (1995 p.6), tells us that, 'the job of the researcher is often that of an observer and each observation is prone to error: therefore, we go out and research to find a better truth.' However, they go on by asking '...if the role of a researcher is that of an observer, then what is the difference between an observer who can draw conclusions with common sense and a researcher?' The answer, 'research is different from common sense because it is done to achieve specific goals, relies on specific methods and is done systematically'.

Having identified two suitable models for this research, chosen specifically to address the aims and questions set out in chapter one (Sections 1.5 and 1.6) the previous chapter described the mechanics of how they work and how they can be combined to suit the complex nature of the client perspective of contractors where trust is concerned.

In conjunction with the aims and questions set for investigation combined with the requirements of the two models a list of hypotheses were developed. This chapter presents these hypotheses before going on to describe how both in-depth interviews and a questionnaire survey were designed and executed in accordance with the prescribed systematic approach required for the chosen models.

5.1 The Aims, Questions and Research Hypotheses:

Table 5.1 (over the page) shows where Hypotheses fall inline with research aims and questions (Page 8 Ch. One). Designed in accordance with prescribed format for Multiple Linear Regression and Correlation Analysis (Norušis 1993, p. 316), the 'Reasoned Action Model' and Butler's (1991) 'Conditions of Trust Inventory'.

Table 5.1: Logical Steps Between Research Aims, Research Questions and Hypotheses

Research Aims (From page 8 Chapter One)	**Research Questions** (From Page 8 Chapter One)	**Research Hypotheses (Below)**
Understand behavioural conditions of trust expected by the client from a contractor throughout the life of a project	**Q1** What are the key conditions of trust expected by the client from a contractor throughout the life of a project	**Hypothesis & Sub – Null Hypotheses 7**
Understanding behavioural intention toward trusting that contractor in future projects taking into consideration the effect of:	To what extent does a client's willingness to trust a contractor relate to:	
(i) the client decisions-maker's (CDM's) past experience of a contractor's behaviour	**Q2a** a client's past experience of that contractor?	**Hypothesis 6**
(ii) the client decision-maker's own attitudes and beliefs about the likely outcomes of trusting the contractor in future	**Q2b** a client's beliefs about the outcome of trusting the same contractor in future?	**Hypothesis 3**
	Q2c a client's overall attitude toward trusting a contractor?	**Hypothesis 2**
(iii) the influence on CDM's of normative expectations from key referents (such as architects)	**Q3** To what extent does key third party influence affect overall client trust in contractors?	**Hypothesis 5** **Hypothesis 4**

Note: Hypothesis 1 (Below) represents the overall *predictive* part of the modified reasoned action model (figure 4.2 – previous chapter), testing the link between Behavioural Intention (BI) and reported Behaviour (B). All of the above Hypotheses aid ***understanding*** of client Behavioural Intention (BI), by testing firstly, the links between the dependent variable BI and independent variables of Past Experience (PE), Attitude (Aact) and Referent Influence (or Subjective Norm – SN). Secondly its tests the links between Consequential Beliefs (b.e) & Attitude (Aact), between Normative Beliefs (nb.mc) & Subjective Norm (SN) and finally between PE and Conditions of Trust (CTI).

Hypothesis 1:

H_1 There is a linear relationship between a client decision-maker's Behavioural Intention (BI) to trust a familiar contractor and actual trust Behaviour (B).

$H_{0\text{-}1}$ There is *no* linear relationship between a client decision-maker's Behavioural Intention (BI) to trust a familiar contractor and actual trust Behaviour (B).

Hypothesis 2:

H_2 There is a linear relationship between sum of all Attitude items (ΣAact) toward trusting a familiar contractor and the client decision-maker's Behavioural Intention (BI) to trust them.

$H_{0\text{-}2}$ There is *no* linear relationship between sum of all Attitude items (ΣAact) toward trusting a familiar contractor and the client decision-maker's Behavioural Intention (BI) to trust them.

$H_{0\text{-}2alt}$ Client decision-makers Behavioural Intention (BI) toward trusting a familiar contractor is *not* significantly related to their Attitude (Aact).

Hypothesis 3:

H_3 There is a linear relationship between the sum of all Consequential Beliefs of trusting a familiar contractor (Σb.e) and sum of all the client decision-makers Attitude items (ΣAact) toward trusting a familiar contractor.

$H_{0\text{-}3}$ There is *no* linear relationship between the sum of all Consequential Beliefs of trusting a familiar contractor (Σb.e) and sum of all the client decision-makers Attitude items (ΣAact) toward trusting a familiar contractor.

Hypothesis 4:

H_4 There is a linear relationship between the Subjective Normative Attitude (SN) toward trusting a familiar contractor and the client decision-maker's own Behavioural Intention (BI) toward trusting a familiar contractor.

$H_{0\text{-}4}$ There is ***no*** linear relationship between the Subjective Normative Attitude (SN) toward trusting a familiar contractor and the client decision-maker's own Behavioural Intention (BI) toward trusting a familiar contractor.

$H_{0\text{-}4alt}$ Understanding of client decision-makers Behavioural Intention (BI) is ***not*** significantly improved with the inclusion of Subjective Normative Attitude (SN) with the Expectancy-value element when creating Reasoned Action.

Hypothesis 5:

H_5 There is a linear relationship between the sum of all Normative Referents (Σnb.mc) on trusting a familiar contractor and the client decision-makers Subjective Normative Attitude (SN) toward trusting a familiar contractor.

$H_{0\text{-}5}$ There is ***no*** linear relationship between the sum of all Normative Referents (Σnb.mc) on trusting a familiar contractor and the client decision-makers Subjective Normative Attitude (SN) toward trusting a familiar contractor.

Hypothesis 6:

H_6 There is a linear relationship between a client decision-maker's own Past Experience (PE) of a contractor's behaviour and their Behavioural Intention (BI) to trust them.

$H_{0\text{-}6}$ There is ***no*** linear relationship between a client decision-maker's own Past Experience of a contractor's behaviour and their Behavioural Intention (BI) to trust them.

$H_{0\text{-}6alt}$ Understanding of client decision-makers Behavioural Intention (BI) is ***not*** significantly improved with the inclusion of Past Experience (PE) with the Reasoned Action Model.

Hypothesis 7:

H_7 There is a linear relationship between the sum of the ten Conditions of Trust (ΣCTI) and the client decision-maker's Past Experience (PE) of the contractor's behaviour.

$H_{0\text{-}7}$ There is ***no*** linear relationship between the sum of the Ten Conditions of Trust (ΣCTI) and the client decision-maker's Past Experience (PE) of the contractor's behaviour.

Sub - Null Hypotheses 7:

$H_{0\text{-}7\text{-}1}$ There is ***no*** linear relationship between a contractor's *availability* and a client decision-maker's past trust experience (PE) of the contractor

$H_{0\text{-}7\text{-}2}$ There is ***no*** linear relationship between a contractor's *competence* and a client decision-maker's past trust experience (PE) of the contractor

$H_{0\text{-}7\text{-}3}$ There is ***no*** linear relationship between a contractor's *consistency* and a client decision-maker's past trust experience (PE) of the contractor

$H_{0\text{-}7\text{-}4}$ There is ***no*** linear relationship between a contractor's *discretion* and a client decision-maker's past trust experience (PE) of the contractor

$H_{0\text{-}7\text{-}5}$ There is ***no*** linear relationship between a contractor's *fairness* and a client decision-maker's past trust experience (PE) of the contractor

$H_{0\text{-}7\text{-}6}$ There is ***no*** linear relationship between a contractor's *integrity* and a client decision-maker's past trust experience (PE) of the contractor

$H_{0\text{-}7\text{-}7}$ There is ***no*** linear relationship between a contractor's *loyalty* and a client decision-maker's past trust experience (PE) of the contractor

$H_{0\text{-}7\text{-}8}$ There is ***no*** linear relationship between a contractor's *openness* and a client decision-maker's past trust experience (PE) of the contractor

$H_{0\text{-}7\text{-}9}$ There is ***no*** linear relationship between a contractor's *promise-fulfilment* and a client decision-maker's past trust experience (PE) of the contractor

$H_{0\text{-}7\text{-}10}$ There is ***no*** linear relationship between a contractor's *receptivity* and a client decision-maker's past trust experience (PE) of the contractor

5.2 Methodological Programme

The fieldwork was executed through two key methodologies (East 1997 p.141; East 1993 p.88; Tuck 1976 p.74). In-depth interviews carried out face-to-face and a questionnaire survey carried out by mail. For each method the following work was carried out in relation to four issues:

1. Designing and piloting each tool to be used in both the interviews and survey.
2. Investigating and designing appropriate population and sampling procedures.
3. Development of a sound protocol for ensuring successful administration of each method into the field.
4. Being clear from the beginning how analysis for each method would be carried out (dealt with in chapters 4 and 6).

In describing what was done, these four points will be described in relation to each method respectively. In-depth interviews first, then the questionnaire survey.

However, before proceeding both the 'Reasoned Action Model' and 'Butler's Conditions of Trust Inventory' have strict procedures in relation to their execution and analysis (Chapter 5). One exception to this is the additional importance played by the interviews in validating 'Butler's Conditions of Trust Inventory'. Because CTI was originally developed for application to a different situation this was done in order to develop carefully worded items in each condition category to suit the circumstances surrounding the client-contractor relationship. Therefore, this process was not only an *elicitation* process, but a process of *validation* as well.

Mitchell (1993 p.26) provides tips on planning and executing industrial depth interviews.

Some integrated into this work with interviewees later on:

- Contact potential interviewees by phone first.
- Ascertain suitability for interview in terms of knowledge and position
- Subsequently send a letter to confirm date and time of interview and outline topics to be covered.
- Emphasis confidentiality of responses.
- Reaffirm this at beginning of interview.
- Develop good rapport (this begins during preliminary telephone conversation).

- Dress in keeping with that of the respondents.
- Conduct interview at respondent's convenience in terms of time and place.
- Avoid interviewer bias and develop means for maintaining consistency between interviews.
- Where is it agreed, tape the interview. It increases the accuracy of data collection.

With the questionnaire survey Jobber and O'Reilly (1996 p.29 & 1995 p.414) discuss their research in industrial mail surveys and different techniques for inducing response:

- Prior notification by telephone.
- Prepaid monetary incentives.
- Non-monetary gifts.
- Stamps on return envelopes.
- Anonymity.
- Follow-up questionnaires.

It was decided that prior notification by telephone was not feasible and gifts (monetary or not) inappropriate. However, 'replied paid' envelopes, a promise of anonymity and follow-up questionnaires would be used.

5.3 In-depth Interviews

5.3.1 Purpose of the In-depth Interviews:

Purpose was twofold: First, provide material that would aid the design of the questionnaire later on. This involved an elicitation process to gather data on the following three points:

1. Overall 'Attitudes' and 'Salient consequential beliefs' about trusting contractors for inclusion into the 'Attitude toward the act (Aact), beliefs (b) and evaluation of beliefs (e), elements of the questionnaire.
2. 'Salient Referents' for the subjective norm (SN), normative beliefs (nb) and motivation to comply (mc) elements of the questionnaire.
3. The validation of existing categories identified in Butler's 'Conditions of trust inventory' (CTI), which were to be used to aid understanding of clients 'Past Experience' (PE) in the 'Modified Reasoned Action Model' questionnaire.

In part, results from the interviews would be used to decide which condition categories would be used in the questionnaire. In the end all condition categories were kept.

In the interviews, interviewees reflected upon their business and professional experience of contractors, helping to ascertain how they related to the issues put to them, whilst providing examples and, most importantly, revealing the language used to describe the points they made. This information aided questionnaire design.

The second overall purpose of the in-depth interviews was to provide additional background information about trust and how it works, or does not work, in client-contractor relationships. This would be used later in the discussion chapter of both quantitative and qualitative findings to add to the richness of the research, and as a means to comparing different types of data to see what broader insight could be drawn from the topic under examination.

5.3.2 Depth Interview Design and Execution.

It was necessary to develop a protocol, which ensured consistency in approach between interviews, whilst helping interviewees maintain focus and understand what was required of them. Each interview was semi-structured in that every interviewee was asked the same open-ended questions. This was to ensure that certain types of information were consistently captured for inclusion into the questionnaire design that would be executed in the mail survey later. The types of information required relate to the different sections shown in the schematic of the Modified Reasoned Action Model (Figure 5.2). Each part of the two models, whilst combined into a single model, have their own respective sections within the questionnaire requiring specific types of information.

To capture the information needed for each part of the Modified Reasoned Action Model, the depth interviews went through four stages:

1. Introduction and warm up.
2. Describing clients overall attitude toward trusting their contractor.
3. Validating the existing CTI conditions of trust categories.
4. Eliciting salient referents.

For stages 2 to 4, show cards were used. These were designed to help communicate what was required of the interviewee and help both them and the interviewer maintain focus. Their use is explained in each section below. Also, the interviewer had a check sheet to aid memory, ensure consistency, and take notes if needed (Appendix B.1).

5.3.2.1 Introduction and Warm-up

The first few minutes of each interview were spent introducing the interviewer, and the reason for the interview. The structure of the interview was then explained; that there were show cards and that the interview was in three phases. It was explained that there are no right or wrong answers to the questions, and that what was important was the opinion of the interviewee as the key employee in their organisation, who represents the client organisation where procurement of contractor services for new and refurbishment building work is concerned. Interviewees were given a chance to talk about themselves and how they saw their role. As will be seen later interviews had been arranged with key employees within the client organisation. In some cases the contact explained that whilst they were employees of the client organisation, some of them also viewed themselves as consultants. In these cases it was made clear that it was their views as an employee that was of interest. Also, during the warm up, it was explained that for accuracy of data capture it was preferable to tape the interview. The interviewees were reassured that anything they had to say would be held in the strictest confidence and that the data would be used for a generic questionnaire. All participants agreed to being taped. The tape recorder was then switched on and the interview would start.

5.3.2.2 Eliciting Clients' Attitudes and Salient Consequential Beliefs

First, card one was revealed (Appendix B.2). The purpose of this phase was threefold:

1. Gain a client perspective of trust in the contractor through the long period of exchange that exists between clients and contractors, thus, providing some general insights and ideas to augment understanding and material for discussion later on.

2. To elicit the general attitudes toward trusting the contractor for inclusion in the *Attitudinal* (Aact) element of the questionnaire.
3. Elicit salient consequential beliefs (positive and negative) arising where client decided to trust a contractor.

This material would ultimately relate to **Hypotheses 2 & 3**. The interview started by simply asking the interviewee to think about the trust they have in contractors. The interviewee was not led by any qualifying statements based on assumptions, or whether this existed or not, or whether this was a good or bad thing. However, the interviewer would go on to ask the interviewee to think about the role and level of importance, they considered trust played during each phase shown on card one. Time was given to allow them to think about this. The interviewee was then allowed to respond in their own time. Sometimes they went step by step, others would take a more general approach, addressing points shown on the card as they saw fit. Either way the interviewer would tick off each phase as it was covered.

Second, the interviewee was asked to briefly give the interviewer their overall opinion toward the consequence of trusting contractors. The sort of responses expected from this phase were items like, 'it's a good or bad thing to do', 'sensible or risky thing to do', 'beneficial or harmful thing to do', etc. These will be entered into the *Attitudinal* (Aact) element of the questionnaire (Figure 5.2).

Thirdly, the interviewee was asked to consider the good and bad consequences of trusting a contractor. Responses to this were for use in the *Consequential Beliefs* (b.e; b & e) part of the model.

For the second and third parts of this phase of the interview it was essential that *Saliency* be maintained in the interviewee answers (East 1997 p.152-4; East 1993 p.72-74; Ajzen and Fishbein 1980 p.63). The reason for this was that ideas reported by the interviewee had to be those most accessible or apparent in their thoughts. Pressure to think hard on

the subject causes vagueness. This counts against the theory for empirical purposes (East 1997 p.152-153). Tuck (1976 p.88) defines salience in this case as, 'the first beliefs, which a respondent produces in answer to an open-ended question'. In order to ensure success in this, when answers were given the interviewer waited until the interviewee stopped. No discussion was undertaken. The interviewer would then simply ask, "Anything else?". This was repeated until, in some cases, the interviewee started to analyse what they were saying. Whilst they were allowed to continue, requirements for the questionnaire stopped there. It was then explained, this marked the end of the first phase of the interview, which was then brought to a close by asking whether there was anything the interviewee wanted to add or comment upon before moving to the second phase. Results from this phase of the interview were intended for the *Attitudinal* (Aact, b.e, b & e) elements of the Modified Reasoned Action Model (Figure 4.2).

5.3.2.3 Validating the Existing Conditions of Trust Categories

Card one was removed and card two produced (Appendix B.3). The purpose of this phase was to get the interviewee to think about each of Butler's ten 'Conditions of Trust' and relate them to their experience of contractors. The material would ultimately relate to **Hypothesis 7**. All ten words were covered up so the interviewee could not see what was coming. It was explained to the interviewee that ten words were there that might characterise a contractor's behaviour throughout a project, from the tendering phase of their exchange relationship through to any follow-up activities the contractor might carryout after completion and hand over. Each word was revealed one at a time, with the preceding word covered up again when finished with. This was considered essential for validation purposes, so that each word was given careful and focused attention, avoiding any confusion with the other words. For each word shown on the card the interviewee

was required to describe separate events or occasions in their experience of contractor behaviour which;

1. resulted in the building or reinforcement of trust, and
2. resulted in the undermining or destruction of trust

The purpose of this exercise was to determine how the client related to each of the ten conditions of trust, whilst providing both criteria and language for items to be included within each condition category within the questionnaire later on. Results from this process would lead to a decision on which categories were most appropriate for this research, and which ones would be dropped. However, interviewees were able to relate experiences to all of the categories, and therefore they all went into the final questionnaire. Furthermore, the answers provided the researcher with a number of mini case examples of trust building and trust breaking behaviour on the part of contractors.

This process followed the lines described by Butler (1991 p.647), in which he had used semi-structured, open-ended interviews to elicit from interviewees:

(a) characteristics of two specific people, one trust and one not trusted,
(b) outline critical incidents that led to the building of trust and
(c) critical incidents that led to the destruction of trust.

This was reported (p.647) as being consistent with Buss and Craik's (1983 p.1085) approach to construct validity. One point of difference between Butler's (1991) work and this is that not all contractors' behaviour has the same level of immediacy as that experienced in interpersonal relationships; which further justified the need to carry out the exercise. Although others using Butler's (1991) Conditions of Trust Inventory do not report executing this procedure (Hannah 1991; Fletcher and Peters 1997; Peters and Fletcher 1995); it was considered important for rigour in this research. Results from this part of the interview were intended for the Conditions of Trust and overall measure of *Past Experience* (CTI & PE) element within the Modified Reasoned Action Model (Figure 4.2). After each category was examined individually, the interviewee then saw

them all at once. Once again, they were asked if there was anything they wished to add or comment upon before drawing to a close the second phase of the interview.

5.3.2.4 Eliciting Salient Referents

Card two was removed and card three produced (Appendix B.4). The purpose of this phase was singular; to elicit key salient referents as defined earlier (Section 4.2.3). This material would ultimately relate to **Hypotheses 4 & 5**. The aim of card three was to prompt them into thinking about the nature of the relationship they have with the contractor. Then they answered the following question:

'Faced with the question of whether a contractor was or is trustworthy or not, there may be individuals or organisations you can consult, who maybe able to advise you. Individuals or organisations, whose opinion you might value.'
'Can you quickly list for me those whose opinions you might seek if you were trying to establish a contractor's level of trustworthiness?'

Once again, as with the *Attitudinal* element of the interview (Section 5.3.2.2), saliency is of critical importance. The same process was applied, this time asking, "Anyone else?" This marked the end of the interview. At which point it was informally agreed that they might help in the piloting of the questionnaire once written. Results from this part of the interview were for the *Normative* (SN, nb & mc) elements of the Modified Reasoned Action Model (Figure 4.2).

5.3.3 Sourcing Appropriate Population Sample Frame and Sampling Procedures

Prior to executing the qualitative depth interviews, research had been undertaken in order to define an appropriate population from which a suitable sample could be drawn. This proved a difficult process, which required a substantial amount of investigative research. The focus of the research required a sample frame to be compiled, as there were no suitable existing publications or indexes to work from. As has already been highlighted this research focused on trust by experienced private sector clients interested in new and refurbishment building work, who could be expected to have an on-going works

programmes with appropriate forecasted budgets. In compiling a suitable population sample frame three key issues needed to be addressed:

1. What source could reliably be used to extract a suitable population sample frame?
2. Having identified a source, what criteria should be used to qualify candidates for inclusion in the population?
3. Having formulated a population sample frame, what method of sampling should be used to determine prospective interviewees?

5.3.3.1 Sourcing a Suitable Population Sample Frame

In the first case the Financial Times, London Share Service was used as a database for companies to be included in a population sample frame. It was assumed companies most likely to have property under development on an on-going basis were Property Developers as listed under the property section. Property developers are known to have interests in a variety of sectors including housing, hotels, retail, offices and industrial developments. It was therefore decided to include other sections from the share service index that had comparable interests to the property developers. Hotels groups from the Leisure & Hotels section and companies within the Grocery and General Retailers sections, where it was believed they were responsible for their own building stock (not tenants), were included within the database from which a population sample frame could be developed. One addition to this was the British Airports Authority (BAA). With approximately a £400m per annum works budget and interests in retailing, offices and other buildings, while also being a major client influence within the UK construction industry, it was considered important to include them in the sample frame.

5.3.3.2 Qualification for Inclusion in Population Sample Frame

To further ensure that companies within these four categories making up the database were involved in on-going works programmes and represented a suitably influential part in the new and refurbishment client sector of the UK construction industry, only companies with a Market Capitalisation greater than or equal to £15m per annum were chosen from

the index. This resulted in a population sample frame of 136 possible respondents. Inclusion of contacts at BAA Heathrow and Gatwick increased it to 141.

This initial population sample frame was considered adequate for the depth interviews. It was later expanded for the of the mail survey. A systematic random probability sampling procedure would be used to select prospective client companies from the population.

5.3.3.3 In-depth Interview Sample: Random Probability Sampling Procedure

It was felt that 15 depth interviews should be carried out, from which the best would be used to elicit the necessary information for the questionnaire survey. It was therefore decided to select 16 company names from the population sample frame for this purpose. Addition of the list of contacts at BAA brought the total to 21 prospects, thus allowing for an element of drop out due to companies who either were not interested or had to cancel the interview. Sampling was undertaken utilising the 'random probability sampling procedure' (Hague and Harris 1993 p.65-66), and administered as follows:

N = Population size (total number in population sample frame 136)
n = Size of sample required (No. of interviews 16)
k = Sample interval $\quad k = \frac{N}{n}$

In selecting a systematic sample of *16* possible interviewees, the sampling interval was required. In accordance with the above equation the sampling interval was found to be 9. Then a random number between 1 and k (1 and 9) identified the starting point for sample selection (starting point was found to be 3). Therefore, samples selected from the sample frame would be; 3, 12, 21, 30, 39 etc. Once the 16 prospects had been identified, contacts from BAA were simply added on.

5.3.3.4 Organising In-depth Interviews

Two approaches were used here. First was through contacts with BAA. Dr Smyth (SCES, Oxford Brookes) and Martyn Quarterman (Value Management Limited) provided names and details of senior managers working at Gatwick and Heathrow, responsible for procurement and contracts. Letters were sent to these people stating who had given their details, and that it had been suggested that they might be able to help with the research. A follow up call was made a few days later. Dates and times for interviews were arranged and contact details given in case they needed to get in touch.

Negotiation into the field with other companies from the sample involved a more investigative approach. Having identified which companies to target, addresses and phone numbers were retrieved from Kompass Business Directory. Each was then called. In order to ensure that calls ran smoothly and relevant managers were contacted a 'Call Map' was developed (Appendix B.5). This was used every time to good effect. Whilst it was necessary to call back on a number of occasions, in the end contact was made with people responsible for procurement and contract decisions involving contractors' services for new and refurbishment building works. Some companies identified for possible interviews were eliminated due to location. Time and money considerations resulted in contacting companies closest to Oxford Brookes University first. Following the process marked out on the 'Call Map', meetings were arranged with 18 companies. Contact details were left in case problems arose. Confirmatory letters were sent out on the same day. The process was very successful. Having decided 15 interviews were needed, and 21 leads followed up, the process had resulted in a total of 20 interviews scheduled. Two prospects later cancelled with apologies. Alternative arrangements were made but due to heavy work commitments these eventually were called off. With thanks for their time and consideration.

5.3.4 Analysis of In-depth Interviews

This was a relatively straightforward exercise. Strauss and Corbin (1990 p.81) refer to a procedure that starts with scanning documents for words, phrases and sentences that strike you are as significant, important or of interest. They go on to discuss procedures for developing theories and constructs from the material. However, given the structured nature by which in-depth interviews had been carried out, constructs were already in place. Out of the 18 interviews carried out the nine that were considered to be richest in data were used. All that was required was to sift through the material and remove items elicited during each in-depth interview for the different sections relating to the Modified Reasoned Action Model for questionnaire purposes (East 1993 p.72; Ajzen and Fishbein 1980 p.62 *ff*; Tuck 1976 p.77).

Initially, in line with Strauss and Corbin (1990 p.81), interviews were transcribed. However, this was time consuming and the benefits of the exercise did not merit continuation. Instead, tapes were played back, the responses given to each section of the interview noted, and a tally made of the number of times each piece of information was repeated (Example - Appendix B.6). A note was made of the number on the tape counter so that statements could be located again if need be. Over time a spreadsheet of 42 pages was developed of the different responses given under each interview. Items that were repeated most often or were of particular interest, and as Strauss and Corbin (1990 p.81) state, were felt to be 'significant, important or of interest' were separated from the material (See Table 5.2 to 5.2.3 – Over the page). As can be seen, this was then examined and comments made regarding what appeared to be the strongest themes arising from the material. It was based on these themes that drafts of the questionnaire in conjunction with the prescribed approach to questionnaire design (East 1997 p.141-143; East 1993 p.88 & 115; Ajzen and Fishbein 1980 p.42, 55 & 57; Tuck 1976 p.74 *ff*) were formed.

Table 5.2.1: Elicitation of Depth Interview Data to Aid Questionnaire Design			
Conditions of Trust	**Qualitative Findings (Tally)**	**Case Ref. No. / Tape Counter Position**	**Comment**
Availability (Items in *italic* put into Loyalty)	• Contractor should provide regular contact as required (5) • Access to a person important (4) • *Trust contractor that other projects don't get in the way* (5) • Always there when I phone (5) • Technology has helped (e.g. mobile phones, email etc.) when contacting particular people (4) • Pick up phone and speak to directly/quickly to someone who will attend to the issue (4) • *Should contractor have tendered in the first place if too busy* (3) • Does contractor tend site when I want them too (3) • If contractor not available, not help matters, undermines trust (3) • Good Contractors you can get in contact with at any stage. Where you're trying and they are unavailable or you get no response, that undermines trust. • Having a contact there when required builds confidence in the contractor	2A/243, 2B/224, 3A/316, 3B/198, 4A/129 2A/255, 2B/224, 3B/189, 5A/159 2A/079, 2B/194, 3A/308, 3B/458, 5A/381 2A/260, 2B/218, 3B/189, 4A/130, 5A/170 1A/260, 2A/260, 2B/227, 4A/130 2A/ 260, 2B/218, 3B/189, 4A130 3A308, 3B458, 5A381 1B/243, 2A/243, 2B224 2B/228, 3A/321, 5A/161 2B/224, 4A/136, 4A/139, 5A/159 2A/252	Contact as needed directly and quickly. With technology little excuse. Do they attend site meetings.
Competence	• Contractor experience with type of project helps overcome problems (4) • Am I confident they know enough about the project (3) • I have to know they have full knowledge of a project, to trust them to do it (2) • Are things being done correctly • Demonstrate they know what they are doing, substance behind leadership, and capable site personnel and office staff • Previous experience	1A/294, 1B/ 280, 3A/441, 3B/238, 5B/410 3A/ 107, 5A/063, 5B/043 3A/117, 5A/063 2B/240, 5A/191 1B/264, 2B/240, 5A/189-91, 5B/400 1A/286, 2A/286	Confidence in ability to manage project and therefore people. Emphasis on project and people management skills.
Consistency	• Past performance places expectations on future performance (5) • Discrepancy in standards between jobs (4) • Does contractor live up to expectations raised earlier (5) • Consistency is an important aspect (3) • Different teams = different product • Largely down to individuals • Two separate contractors 7tendering processes, one was very good aand one very poor	1B/303, 2A/286, 3A/441, 3B/238, 5B/410 1B/303, 2A/326, 3A/404, 5B/413 1A/103, 2A/122, 2B/080, 3A/158, 5B/054 2A/331, 3A/260, 3B/412 5B/413 2A/342, 3A/448, 4A185, 5A/204 1B/334	Expectations & Performance. Not to mix up with P-F below. Maybe consistency between teams, and quality of work
Discretion Items in *italics* relates better to openness or beliefs	• During or after project contractor said something they shouldn't to wrong person • Where contractor comes forward with proposals/alternatives • Try not to leave too much to contractor discretion, unless they can show they are on same wave length • Behaviour when coming into contact with other people (e.g. tenant wanting to see site) People talking to one another (friend telling a friend) • *Knowing when to communicate/communication builds trust*	1A/388, 3A/465, 5A/283, 5B/451 1B/344, 2B/307, 3B/307 1B/349, 2A/379, 2B/293 3A/465, 5B/451 1B/370, 3B/707	Confidences re: sensitive information Conduct on site
Fairness	• Are the contractor claims conscious regarding variations (4) • Contractor will push hard the boundary of constraint under which he has been placed (3) • Extent to which claims are intentionally exaggerated (3) • Fairness doesn't come with contractors they get what they can get! (4) • Are they prepared to work as part of team, or are they just looking for potential claims	1A/396, 2A/424, 1B/381, 2B/327, 3A/574, 4A/239 2A/418, 2B/330, 5B/492 2A/428, 3A/594, 4A/243 2B/332, 3A/595, 4A/254, 5B502 1A/427, 4A/273	Cost/claims conscious How reasonable are they? Team player / problem solver or causer

Table 5.2.2: Elicitation of Depth Interview Data to Aid Questionnaire Design - Continued

Conditions of Trust	Qualitative Findings (Tally)	Case Ref. No. / Tape Counter Position	Comment
Integrity	• Associated with honesty (Dishonesty) (4) • Does contractor identify snags/problems before you do (4) • Some contractors, if you miss it, think fair enough, and just carry on (3) • Breaches of integrity have been defined in ways such as: Inducements Cover-ups Non-disclosure of important elements on site Failure to comply with regulations Dis-information at site meetings Lies as to why something has or hasn't happened • Integrity is of high priority, and abuse of integrity means the contractor has no second chance • Do they carry out their own snagging. Good contractor. Use them again.	2B/350, 3A/657, 5A/356, 5B/556 1B/418, 2B/352, 3A/049, 5A/358 1B/443, 2B/354, 5A/365 3B/432, 3B/441, 4A/279, 5A/773 3B/421, 5A/773 1B/426, 2B/352	Honesty Will identify problems Not cover up etc. Can rely on information being given. Not given dis-information.
Loyalty *Italic* points under Availability above moved here	• May not be the right word to use, or whether loyalty is even relevant / Not an issue (7) • Where the contractor does jobs for other people. Is this about loyalty? (4) • Also See *Availability* • Contractors coming out of the woodwork when times are bad • Where a contractor behaves in way that is detrimental to selves, in short term, supports client in long term • Avoiding cover-ups	1A/511, 1B/468, 1B/487, 2A/ 485, 2B/360, 2B/365, 5A/376, 1A/473, 1B/468, 2B/360, 2B/365 3B/494 2A/496 1B/492	Priority jobs? Availability issues? Discretion issues? Avoiding opportunistic behaviour?
Openness	• Usually hide/cover problems and have to find out yourself (5) • Problems often left until too late. Should be mentioned earlier on. Openness would be good (8) • Small things should be communicated before they become a problem (3) • Why did they not ask before/ mention it? (3) • Show what they have done, how they arrived at price/cost (4) • Show they're not ripping you off (4) • Some do not have an open book and will not tell you the costs. This needs justifying (3)	2B/389, 3A/788, 3B/702, 4A/402, 5A/786 2B/391, 3A/785, 3A/789, 3B/702, 3B/707, 4A/404, 4A/406, 5A/797 3A/780, 3B/702, 4A/405 3B/707, 4A/405, 5A/797 1B/512, 2A/533, 3A/621, 4A/359 1B/513, 3A/621, 3B/543, 4A/359 1B/525, 3A/635, 3B/575	Contractor comes forward with problems. Communication / information flow. Transparency re: costs and profitability
Promise-Fulfilment	• Need confidence that contractor will do what he has agreed (8) • Finish to a good standard (quality) on time (5) • Under contract to deliver product on time, at price (4) • It is about achieving results. What have they said they will do, and what they achieve in practice (3) • Living up to pre-qualification expectations and post tender promises made. Is contractor as competent as impressions would suggest in pre-tender interviews. Failure to do so can be construed as a catastrophe (6)	2A/252, 2B/081, 2B/403, 3B/604, 4A/375, 5A/443, 5A/531, 5B/675 1B/551, 2B/406, 3A/054, 4A/422, 5A/455 2A/114, 2B/404, 3A/052, 4A/422 2B/085, 3A/416, 3B/608 1A/547, 1B/551, 2A/307, 2A/598, 4A/428, 5B/675	Fulfils obligations under, contract. Will deliver according to what was agreed, before and during project This could include defects liability period
Receptivity	• Degree to which contractor is receptive to requests by client • Contractors need to be receptive to what I say (3) • Must be receptive to challenges & client problems (3) • Has or has not the contractor taken in what you want them to do (3)	2A/608, 2B/427, 3A/879, 3B/662, 5A/500 3A/879, 3B/657, 5A/492 3B/663, 4A/467, 5A/512 1A/605, 2A/675, 4A/439	Receptive to ideas, problems & requests. Do they understand what client wants? Will deal with problems.

Table 5.2.3:Elicitation of Depth Interview Data to Aid Questionnaire Design -Continued			
Attitudes and Referents	**Qualitative Findings (Tally)**	**Case Ref. No. / Tape Counter Position**	**Comment**
Overall Attitude With Positive & Negative Consequences	• Concerns about divulging information / quite open with contractors I know • Are they prepared to tell us what's happening quickly / open discussion good / have to communicate • Exchange of information important • Work together, initiated by contractors openness • Go to contractor with problem without feeling risk of claims • Sometimes architect keeps quiet, contractor talks • With openness have potential for success / All projects have problems, but if you talk, a solution can be found, work together • Some have open book regarding variations • Industry cynicism about being up front • During construction limit trust (Unreasonable) • During construction monitor them / trust with safe guards • Can be taken advantage of • The centre of trust for me comes from peoples' behaviour. You can reduce mistrusting behaviour • Need respect going both ways • Choose a contractor right for that particular project • Need to work as a team toward completing goals • Trust is based on experience of a particular contractor • Largely down to individuals (See consistency) • One problem is that clients and contractors have different objectives during the construction process • Unqualified trust is just not possible. Its maintained confidence rather than depending upon trust • Maybe someone is pleasant and trustworthy, but is let down by sub's, or suppliers etc. Alternatively they are squeezing people down the line and this affects client later on. • More reliability = more confidence • Don't automatically trust • If you can hand a job over, knowing they can do it (having confidence), makes my life easier. • Trust the trustworthy = very successful job (with reasonable trust)	1A/026, 3A/070, 2B/380-1, 3A/777, 3A/872, 3B702, 5A/402, 3B/597, 5B/628 1B/521, 3A/157, 3A/639, 1A/528, 3B/702, 5A/403 1A/531 5A/775-77 3A/802-04, 3B/702 , 3A/168, 5A/123 1B/505, 4A/359 3B/517, 5B/622, 2A/105, 1B/085, 1B/105, 2A107, 2A/125, 2B/143, 3A/047, 3A/273 2B/140, 4A/072, 4A/075, 5B/280 5B/204, 5B/253 3A/280, 4A/066 1A/168, 3A/256 1A/149, 3A/034, 4A/059, 5B/324 1A/162, 1B/152, 2B/123, 3A/044, 5A/116 2A/342, 3A/448, 4A/185, 5A/109, 5B/204 2B/150 1B/162, 2A/126, 2B/128, 3A/273 2B/075, 4A/087 1B/095 3A/045 3A/248, 5B/255 1A/177, 3A/266	Fragmented. This section interviewees had most trouble with. However, must maintain saliency. Information exchange and communication. Between client, architect, builder. Cynicism. Monitoring and control. Would trust lead to less of this? If trust is limited this may be construed as unreasonable Trust based on experience. Unqualified trust not possible. Can be taken advantage of re: opportunism and claims maybe? However, if trust can be developed would this help matters? Too many points. Needs reducing for purpose of Reasoned Action Model
Referent Groups / Parties	• Do a financial check (e.g. Jordons or Dun & Bradstreet (5) • Myself & personal experience, knowledge based on contractors previous work (10) • Finance director/ people (2) • Reliable architects past and present (8) • Previous/other clients of a particular contractor (10) • Sub-contractors (5) • Suppliers (3) • Quantity Surveyor (2) • Building Surveyor (3) • Consultant and other engineers (mechanical, electrical, structural (3)	1A/675, 1B/728, 1B/729, 2A/721, 3B/777 1A/058, 1A/173, 1A/725, 1B/040, 2A/758, 2B/223, 2B/554, 3A/032, 3A/071, 5A/649 2A/719, 3B/777 1A/704, 2B/784, 2B/535, 3B/800, 3B/801, 4A/535, 4A/579, 5A/591 1A/694, 1B/748, 1B/783, 2B/542, 2B/545, 3A/037, 3A/389, 3B/249, 5A/606, 5B/756 1A/730, 1B/781, 2A/726, 3B/738, 3B/763 1B/781, 2A/726, 3B/763, 2B/536, 5A/594 3A/038, 4A/579, 5A/595 3B/749, 4A/577, 5A/595	Previous Clients Architects Subcontractors Suppliers Building Surveyor Engineers Quantity Surveyor Directors/people within firm with whom CDM has daily contact?

The following section goes into more detail with regards preparation and execution of the questionnaire survey.

5.4 Questionnaire Survey

5.4.1 Questionnaire Design and Piloting

Questionnaires are the prescribed method of capturing data when utilising both Butler's (1991 p.648; Fletcher and Peters 1997 p.529) 'Conditions of Trust Inventory' and Ajzen and Fishbein's (1980 p.42, 55 & 57; East 1997 p.141-143; East 1993 p.88 & 115; Tuck 1976 p.74 *ff*) 'Theory of Reasoned Action'. The design of each section of the questionnaire was dictated by the different components in the models and the content was derived from the depth interviews as described above.

The modified model used in this research has nine parts, each corresponding with sections in the questionnaire (Appendix C):

1. Beliefs (b)	question 11 (a to g)	Hypothesis 3
2. Evaluation of beliefs (e)	question 12 (a to g)	Hypothesis 3
3. Attitude toward the Act (Aact)	question 13 (a to c)	Hypotheses 2&3
4. Normative Beliefs (nb)	question 9 (a to h)	Hypothesis 5
5. Motivation to Comply (mc)	question 10 (a to h)	Hypothesis 5
6. Subjective Norm (SN)	question 14	Hypotheses 4&5
7. Behavioural Intention (BI)	question 15	Hypotheses 1,2,4&6
8. Conditions of Trust Inventory (CTI)	questions 7 (44 items)	Hypotheses 7_{0-7}1-10
9. Overall Past Trust Experience (PE)	(Within the 44 items)	Hypotheses 6&7

This is the product of a series of pilot tests. Piloting of the questionnaire was carried out twice internally and once externally. First, internally with research colleagues and teaching staff within the school, followed with a detailed discussion with the immediate supervisor. The second pilot was with wider supervisory team for critical feedback.

First pilot: Testing presentation, flow and the time it would take to complete the questionnaire. Changes made as a result of first pilot:

1. Separate introductory explanation from main part of questionnaire by placing it on an additional front sheet.
2. Include a new question 2 in order to determine position held by respondent within client organisation.
3. Bring the budgetary question forward to beginning of questionnaire, so as to deal with lighter questions first before respondent does main part of questionnaire.
4. Change original question 2 in order to separate out some of the categories.
5. Restructure and rewrite the CTI element, as this was long and tiresome for the respondent to work through and appears repetitive.

6. Reduce scaling. Traditionally 7-point bi-polar Likert scales are used in the Reasoned Action Model (East 1997 p.141-143; East 1993 p.88 & 115; Ajzen and Fishbein 1980 p.42, 55 & 57; Tuck 1976 p.74 *ff*). However, CTI scaling uses 5-point bi-polar Likert scales (Fletcher and Peters 1997 p.530; Butler 1991 p.648). Given that the largest part of the questionnaire was CTI and that the questionnaire was large, in order to maintain continuity and reduce complexity for respondents it was decided all questions would work with the latter scale.
7. Reword normative beliefs as they can currently be interpreted in different ways.
8. Reduce number of attitudinal questions and reword them into more appropriate language.
9. Headings were introduced in order to assist clarification of sections and flow within the questionnaire.

Second pilot: Critical discussion with supervisory team:

1. Reword introductory statement on cover page for clarity.
2. Improve spacing on page for ease of writing.
3. Rewrite budgetary question No.4, in order to better determine budget over a period greater than one year. Different companies may only have the one budget. Whilst others may have planned annual budgets over a number of years. Also is the respondent the budget controller?
4. Take away headings in the CTI element, as they will lead the respondent. However, maintain the gaps as this breaks it up a bit and makes it easier to follow.
5. Place a reminder after the long CTI element in the questionnaire. They must continue to think about the contractor as they turn over and the nature of the questions change.
6. Change introductory statements to Attitudinal and Normative parts of the questionnaire.
7. Reorder the attitudinal and normative elements so one flows better on to the next.

Third Pilot: Telephone calls were made to all participants of the depth interviews. They agreed to take part in the piloting of the questionnaire, which was promptly sent out to them. All interviewees returned the questionnaire over a period of two weeks. No alterations were made and the questionnaire went to reprographics for photocopying.

5.5 Population, Sampling and Administering of Survey Questionnaire

Pulling together a larger population sample frame for survey purposes was a difficult task. There was no single source that provided a comprehensive list of companies that fitted the criteria for suitable candidates as prescribed for this study. In order to create a suitably large population sample frame it was necessary to investigate and draw from a variety of different sources. Given the focus of the project, it was not possible to use established lists

available from other perspectives, such as a RIBA Directory or a Housing Association Listing. This being the case, it was necessary to originate a population sample frame. A comprehensive as possible list was produced within the constraints of time and resource faced during a PhD study. Drawing once again from the lists created for the depth interviews taken from the Financial Times London Share Service, this was augmented with the use of the Kompass Directory and the Chartered Institute of Marketing (CIM) Marketing Managers Year Book. The final population of 590 achieved in line with prescribed criteria was believed to be as comprehensive as possible. However, Jobber and O'Reilly (1996 p.29 & 1995 p.420) revealed some disturbing figures on response rates for industrial mail surveys. With response rate figures of 14 percent for surveys to industrial safety engineers, and only 5 percent for design engineers, two things were decided. Given that the population sample frame, was only 590 companies, it was decided that questionnaires would have to be sent to the whole population, rather than through a process of systematic random sampling, in order to have a chance of receiving a suitable number of questionnaires back. Secondly, as stated earlier (Section 5.2), various means were used to try and increase the response rate. The average increases in response rates for the chosen tools is reported to be about 10 percent (Jobber and O'Reilly 1996 p.33), and it was expected that the response could be as low as 15 percent. This would total 91 questionnaires, which was considered a little low. It was decided to go ahead and see what could be done later if there was a problem. In the end a follow up mailing was required. The final response rate was 124 useable questionnaires (a 21 % response rate). Considered satisfactory, analysis started.

5.6 Analysis of Survey Questionnaire

Data was analysed in accordance with the methods prescribed for the models being used. (Fletcher and Peters 1997 p.532; Butler 1991 p.654 & 657; East 1997 p.125 and 1993

p.89; Raats 1992 p.68; Ajzen and Fishbein 1980 p.59; Tuck 1976 p.80). In addition, certain assumptions were laid out as to how results were to be interpreted.

The Expectancy-Value Model: Analysis starts by multiplying Belief (b) items with Evaluation of Belief (e) items. An iterative process of the product of this multiplicative part of the model is then undertaken to identify those beliefs best describing overall attitude. This is illustrated by the (b), (e) & (Aact) boxes in Figure 4.2 in Chapter 4, and represents purely the expectancy-value element of the Reasoned Action Model. Analysis was conducted using Cronbach's (1951 p.297) Alpha Coefficient for internal consistency separately between Belief (b), Evaluation (e) and the Multiplied (b.e) items. A Pearson Correlation Coefficient test was made between the sum of the remaining (b.e) items and the sum of remaining Attitudinal (Aact 1, 2 & 3) scales **(Hypothesis 3)**. Attitude was measured against Behavioural Intention (BI) using both Pearson and Multiple Linear Regression. The purpose of this exercise was to determine the effect of attitude on Behavioural Intention and establish which belief and attitude items identified in depth interviews stand up to statistical tests based on the whole population. This reflected the more reliable items for inclusion within the overall Reasoned Action Model.

Normative Influences on Decision-making: Reasoned Action is a development of the Expectancy-Value Model insofar as it includes a normative element. Analysis of this element starts in the same way as the attitudinal part of the model by multiplying the Normative Belief (nb) items with Motivation to Comply (mc) items. Again, an iterative process for the product of this multiplicative part of the model is then undertaken to identify those items that best describe the overall Subjective Norm (SN) part of the model. This is illustrated by the (nb), (mc) & (SN) boxes in Figure 4.2 in Chapter 4. As before, analysis is undertaken using Cronbach's (1951 p.297) Alpha Coefficient for internal consistency, separately between (nb), (mc) and the Multiplied (nb.mc) items. A Pearson's

Correlation Coefficient test was conducted between the sum of selected (nb.mc) items and the SN scale **(Hypothesis 5)**. The purpose of this exercise was to determine which referents initially identified in depth interviews stand up to statistical tests based on the whole population and therefore reflect those parties most likely to influence the decision-maker. These will be included within the overall Reasoned Action Model.

The Reasoned Action Model: Aact and SN were brought together with the Behavioural Intention (BI) scale and tested using Multiple Linear Regression. BI being the dependent variable, Aact and SN the independent variables. In addition Aact and SN were correlated with BI using Pearson **(Hypotheses 2 & 4)**. Inclusion of the SN may be expected to alter the R square value relating to the Expectancy-value model.

Butler's Conditions of Trust Inventory: There are eleven categories, including overall trust. Each category has four items, one positively worded and three negatively worded. Analysis starts with two tests for internal consistency. The first test, was conducted through multiple correlation of all four items within each category using Pearson's Correlation Coefficient. It is expected that all negatively worded items should result in a negative correlation with the positively worded item for each category. Where this is successful all positively worded items are then removed and the second test applied. This is undertaken using Cronbach's Alpha Coefficient on the remaining three items in each category. Where positive correlation scores are found, or Alpha scores below 0.7 (see assumptions below) in any one category then those items can be considered inappropriate for defining that category and the category would be withdrawn. With the remaining categories, the three items in each would be summed into a single weighting, and then correlated with the overall trust category weighting to determine the level of implied importance to trust. A sum of all category weightings is also correlated with the overall trust weighting. Those categories which have a moderate or strong correlation with

overall trust (PE) are then said to define the conditions of trust that client decision-makers witnessed from past contractor behaviour **(Hypothesis 2)**. Cronbach Alpha scores can also be used to divide the categories into either an input/intent dimension or output/ability dimension of contractor behaviour.

The Modified Reasoned Action Model: Aact, SN and PE were brought together with the Behavioural Intention (BI) Scale and tested with Multiple Linear Regression **(Hypothesis 6)**. BI was the dependent variable, Aact, SN and PE the independent variables. It may be expected that inclusion of PE with the Reasoned Action model will change the R Square value. Pearson will also be applied to BI with Aact, SN and PE.

Assumption 1 - Internal Consistency: Cronbach (1951 p.297) tells us that, 'any research based on measurement must be considered with the accuracy or dependability or, as we usually call it, reliability of measurement'. Where researchers use multiple indicators to measure a single construct the process has been referred to as, 'equivalence reliability testing' (Neuman 1997 p.139) or, 'Internal Consistency Reliability' (Dillon et al 1990 p.371). Cronbach developed the Alpha Score to assess the level of reliability between these multiple items. Shown in this thesis as coefficient α, this, 'is one of the most commonly accepted methods for assessing the internal consistency of a multi-item measurement scale' (Dillon et al 1990 p.371). Interpretation of results adheres to the often-cited rule of thumb given by Nunnally (1978, p.245-6), who suggests that a reliability level of $\alpha >= 0.70$ will suffice, being acceptable for work of an exploratory nature, or that published in academic marketing journals. Where the score reaches $\alpha >= 0.90$ this describes advanced marketing research practice (Rust and Cooil 1994 p.9).

Assumption 2 - Correlation Requirements: Interpretation of results adheres to recommendations made by Ajzen and Fishbein (1980 p.99). Therefore, correlative results

between +/-0.30 and +/-0.50 are moderate while those exceeding +/-0.50 indicate relatively strong relationships between variables. The statistical significance that accompanies the results has no bearing on the strength of the correlation, but does determine level of reliability.

Assumption 3 - Significance Testing: Tests adhere to the social sciences accepted 5% significance level. In short the Null Hypothesis is rejected where probability (p) drops below 0.05 (Coolican 1994 p.234). Therefore, a correlation (or any other statistic) is significant where its probability (p) of occurrence by chance alone is less than 5 in 100 or $P < 0.05$ (Ajzen and Fishbein 1980, p.99; Rees 1995, p.114; Dillon et al 1990, p.513).

Assumption 4 - Beta Weightings Compared to Correlation: In multiple linear regression the researcher sometimes wants to assign relative importance to each independent variable. In this case the dependent variable would be Behavioural Intention (BI), while the independent variables are Attitude toward the Act (Aact), Subjective Norm (SN) and Past Experience (PE). Correlation coefficients as discussed above are one approach, while the Beta Coefficients (β) are another. According to the SPSS User's Guide (Norusis 1993 p.341-2), 'any statement about an independent variable is contingent upon the other variables in the equation'. 'One way to make regression coefficients somewhat comparable is to calculate beta weights', 'However, the values of the beta coefficients are contingent on the other independent variables in the equations'. Therefore, the beta weights provide an indication of how the independent variables influence the dependent, but only in relation to one another, *they do not measure importance*. Correlation will give some indication of the importance of the independent variables in relation to the dependent. This will provide some idea of how important independent variables are (correlation) and what influence they are actually having in relation to one another (beta coefficients).

Assumption 5 - Interpretation of R Square values for Multiple Linear Regression:

When analysing the linear relationship between the dependent variable of Behavioural Intention (BI) against the independent variables of Attitude (Aact), Subjective Norm (SN) and Past Experience (PE), interpretation of the R Square values will be in accordance with Rose & Sullivan (1993 p.177) who state;

"In general, in social research you will not expect to find particularly high values for R square. This is because there are so many things which might contribute to influence a variable such as individual income that we cannot reasonably expect to be able to analyse or even measure more than a few of them. As a rule of thumb, (although depending obviously on the individual circumstances) if you come across R square values of over 0.6 or so in a multiple regression equation in social research, you should regard it with some suspicion!"

This said R squared values of 0.50 and above, can be interpreted as being very good.

Assumption 6 - Aact Formulation: Within the questionnaire for the Reasoned Action Model, the Attitude Toward the Act of Trusting the Contractor (Aact) is represented by three scaled items. The items are presented as 5-point bi-polar scales worded as follows.

Trusting this contractor would be;

(i) extremely important through to extremely unimportant;
(ii) extremely reasonable through to extremely unreasonable;
(iii) extremely beneficial to extremely detrimental.

These items from now on will be referred to as Aact 1, 2 & 3. Analysis of the raw data for the Modified Reasoned Action Model will be undertaken in keeping with those statistical methods prescribed in the literature. For the Conditions of Trust Inventory, this will involve Correlation and Cronbach Alpha Tests (Peters and Fletcher 1995 p.611, Fletcher and Peters 1997 p.532). For the overall Modified Reasoned Action Model, Correlation, Cronbach Alpha and Multiple Linear Regression Tests (Tuck 1979 p.79; Ajzen and Fishbein 1980 p.99; Miniard and Cohen 1981 p.326; East 1990 p.101; Raats 1992 p.68) will be used.

CHAPTER SIX

Survey Results

6.0 Introduction

For the purpose of presenting results each box represented in the Modified Reasoned Action Model (Figure 4.2) has been numbered:

(1) Beliefs (b)
(2) Evaluation of beliefs (e)
(3) Attitude toward the act (Aact)
(4) Normative beliefs (nb)
(5) Motivation to comply (mc)
(6) Subjective norm (SN)
(7) Behavioural Intention (BI)
(8) Conditions of Trust Categories (CTI)
(9)Overall Measure of Past Trust Experience (PE)

In this chapter the results will be presented accordingly. The chapter starts with items (1), (2), (3) & (7), which represent the Expectancy-value Model introduced in chapter four. This relates purely the attitudinal element in the Modified Reasoned Action Model and analysis was conducted in keeping with methodological directions given in chapter five. This is followed by presentation of the results for the normative element in the model, made up of items (4), (5) & (6). The product of the analysis for these first seven boxes is then combined. This brings the Attitudinal (Aact) and Normative (SN) elements together to create the results for the basic Reasoned Action Model.

The chapter then goes on to present results for Butler's Conditions of Trust Inventory (CTI), independently of all other results. This is made up of items (8) and (9.) Once done, the overall measure of reported past trust (PE) is integrated with Aact and SN to create the Modified Reasoned Action Model.

The chapter ends by dividing respondents into small, medium and large budget holder groups, and comparing Aact, SN and PE performance between these three groups. Hypotheses testing and discussion of results is conducted in the following chapter.

6.1 Beliefs(1), Evaluation of Beliefs(2), Attitude(3) and Behavioural Intention(7)

This section represents the *Expectancy-Value Model.* In-depth interviews and content analysis identified seven possible consequential belief items that could be used to aid understanding of client decision-maker attitude to trusting contractors. Quantitative analysis of results from the survey, using all seven items, are presented below. Table 6.1 shows that results from the initial tests for internal consistency, using Cronbach's Alpha Coefficient for all seven Belief Items (b), the Evaluation of those Belief Items (e), and the combination of the two in a seven-item multiplicative beliefs x evaluation (b.e) component of the model. The results were under the required $\alpha = 0.70$, as prescribed by Nunnally's (1978 p.245-246) 'rule of thumb', with a coefficient score of $\alpha = 0.48$ for all seven (b.e) items.

Table 6.1: Cronbach's Alpha (α) and Internal Validity of All Belief and Evaluation Items:

All Items	No. of Cases	No. of Items	*Coef. Alpha (α)*
Beliefs x Evaluation (b.e)	124	All 7	*0.48*
Belief Items (b)	124	All 7	*0.40*
Evaluation Items (e)	124	All 7	*0.60*

SPSS output in Appendix D.1

Therefore, before correlating $\sum$b.e with $\sum$Aact an iterative process of b.e item selection was needed. The process prescribed by McKennell (1970), referred to and practised by Shephard and Farleigh (1986 p.347), improved the overall result (see table 6.2 below).

Table 6.2: Cronbach's Alpha (α) and the Internal Validity of Iteratively Selected Belief and Evaluation Items:

Selected Items	No. of Cases	No. of Items	*Coef. Alpha (α)*
Beliefs x Evaluation (b.e2, b.e3 & b.e4)	124	3	*0.70*
Belief Items (b2, b3 & b4)	124	3	*0.73*
Evaluation Items (e2, e3 & e4)	124	3	*0.72*

SPSS output in Appendix D.2

The iterative process resulted in an α- coefficient for three select items equal or greater than α => 0.70. This showed an improvement on the original seven-item alpha score. This satisfied Nunnally's (1978 p.245-246) 'rule of thumb' for internal consistency and therefore the selected items could now be correlated with ∑Aact 1, 2 and 3.

For correlation purposes, it was necessary to iteratively select the best combination of Aact scales. The best results were achieved when, Aact scale 1 (trusting the contractor is important/unimportant) was dropped and ∑b.e items 2, 3 and 4 were correlated with ∑Aact scales 2 and 3 (trusting the contractor is a reasonable/unreasonable and beneficial/detrimental thing to do). A Pearson Correlation Coefficient test revealed a moderate result of r = 0.30 (p=<0.001, n = 124) (Table 6.3 below).

By isolating three belief x evaluation (b.e) items and correlating the sum of these (∑b.e items 2, 3 and 4) with just the ∑Aact items 2 and 3, it was decided the results were now satisfactory (Ajzen and Fishbein 1980 p.99) for describing, clients' attitude toward trusting a contractor. Discussion of these results, their significance, and how they compare with the literature is covered in chapter seven.

Table 6.3: Sum of Belief (b) x Evaluation (e) Items Correlated With Sum-of-Attitude (∑Aact) Items:

Belief Items:	**Pearson Corr. Coef.** *(With ∑Aact)*	**Signif-cance (t)** *(n = 124)*	**With Just ∑Aact2&3**	**Signif-cance** *(n = 124)*
1. I or my agent would be able to reduce the number of site visits made during the project, compared to last time.	0.15	0.093		
2. Greater chance of an overall successful project.	0.21*	0.020	*0.23*	*0.010*
3. Less monitoring of contractor's performance in terms of quality checks would be needed.	0.22*	0.012	*0.25*	*0.005*
4. Fewer problems with disclosure of information between the contractors, my agent and myself.	0.23*	0.005	*0.25*	*0.006*
5. Place an unreasonable expectation on me, the client, to accept the contractor would perform as agreed.	- 0.21	0.017		
6. Client more likely to be taken advantage of in terms of amount of profit contractor makes.	- 0.15	0.100		
7. Contractor more likely to behave opportunistically with regard to claims.	- 0.15	0.094		
8. ∑ of all 7 b.e items	0.06	0.515		
*9. With Just ∑b.e 2, 3 & 4 (Marked * above)*			***0.30***	***0.001***

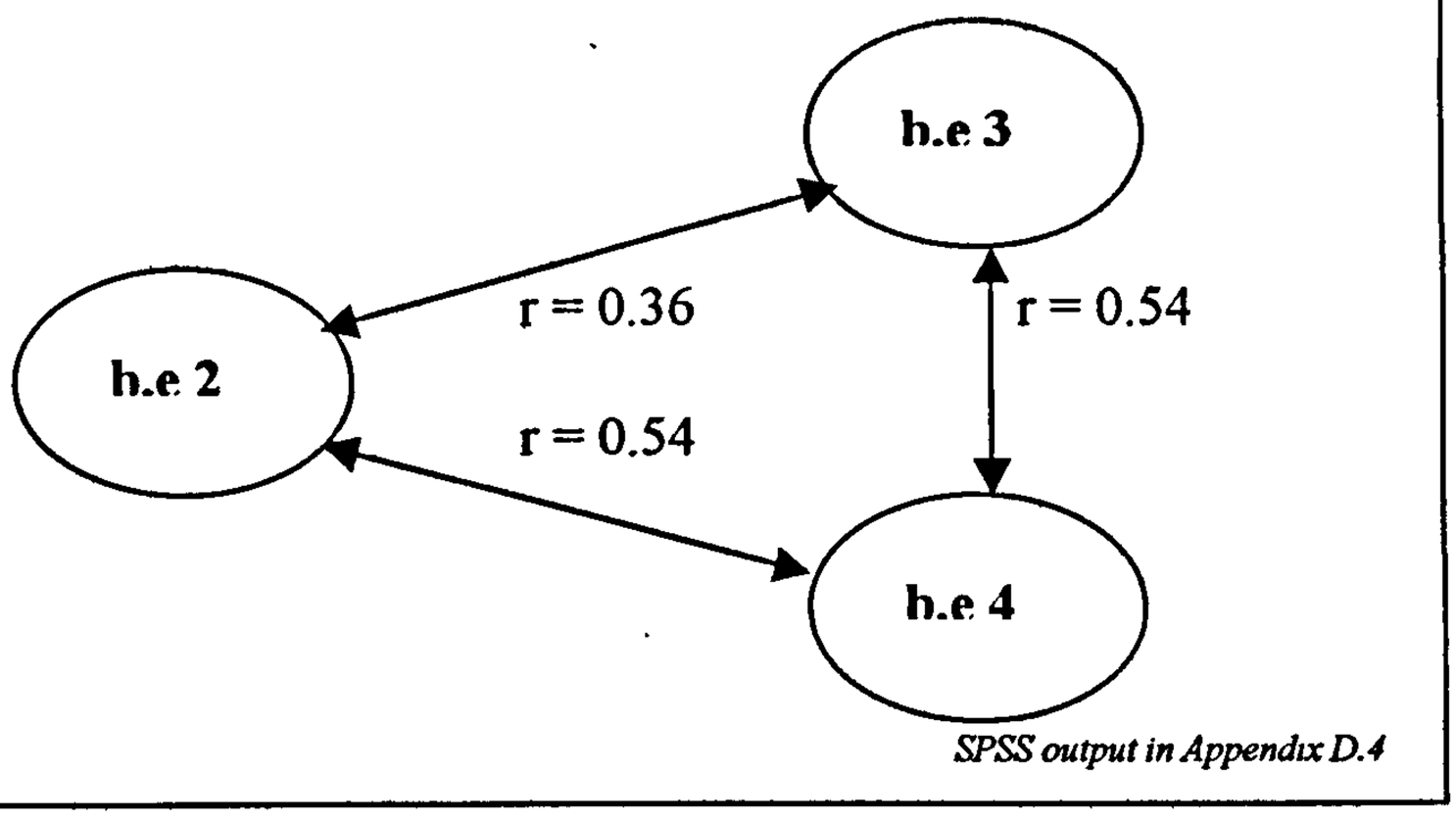
SPSS output in Appendices D.3

6.1.1 Testing for Collinearity Amongst Remaining Belief Items

Before the Expectancy-value model (Boxes 1, 2, 3 & 7) could be completed an analysis for collinearity among the remaining three b.e items 2, 3 & 4 was executed. This was to make sure that the remaining items could not be argued to be measuring the same thing and thus resulting in the, 'accidental selection of one variable rather than another for the multiple regression equation' (Ehrenberg 1994 p.206) to be carried out later.

The results (Figure 6.1 below) showed moderately strong Pearson Coefficients of r = 0.54 between b.e items 3 & 4 and b.e items 2 & 4, with a correlation of r = 0.36 between b.e items 2 & 3.

Figure 6.1: Collinearity Testing Between (b.e) Variables 2, 3 & 4.

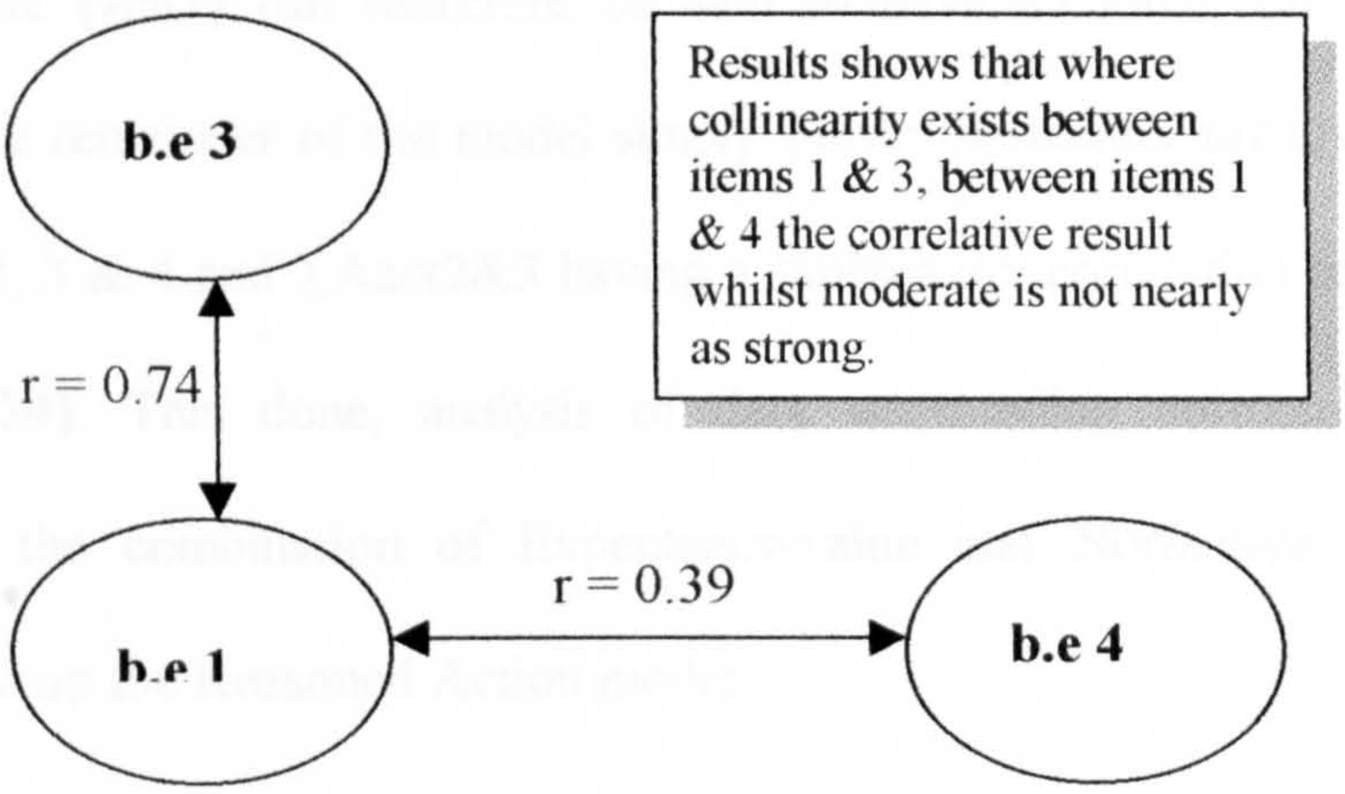


SPSS output in Appendix D.4

The correlative results giving rise the greatest risk of collinearity are those between b.e items 2 & 4 and 3 & 4. However the wording of the statement relating to b.e item 2 is distinctly different from that of items 3 & 4 (See table 6.3), and whilst the correlation between items 2 & 3 and 2 & 4 ranges from the satisfactory to the relatively strong, the likelihood of collinearity appears remote. However, with b.e items 3 & 4 there could be a problem due to their relatively strong correlation and close similarities in the wording of the two items. How this is interpreted depends upon how likely it is that respondents to the survey were thinking of the same thing when considering the different b.e variables. If these items express the same thing in the minds of respondents, then one or more of

these items would need to be removed. This was tested by re-introducing b.e item 1, and examining correlations between b.e variables 1 & 3 and 1 & 4 (Figure 6.2 below) because the wording of the statement pertaining to b.e item 1 was very similar and might be construed as relating to the same issue as either of b.e items 3 or 4. As the results show, there was a strong correlative result of r = 0.74 between b.e 1 & 3, whilst only a satisfactory correlation of r = 0.39 between b.e items 1 & 4.

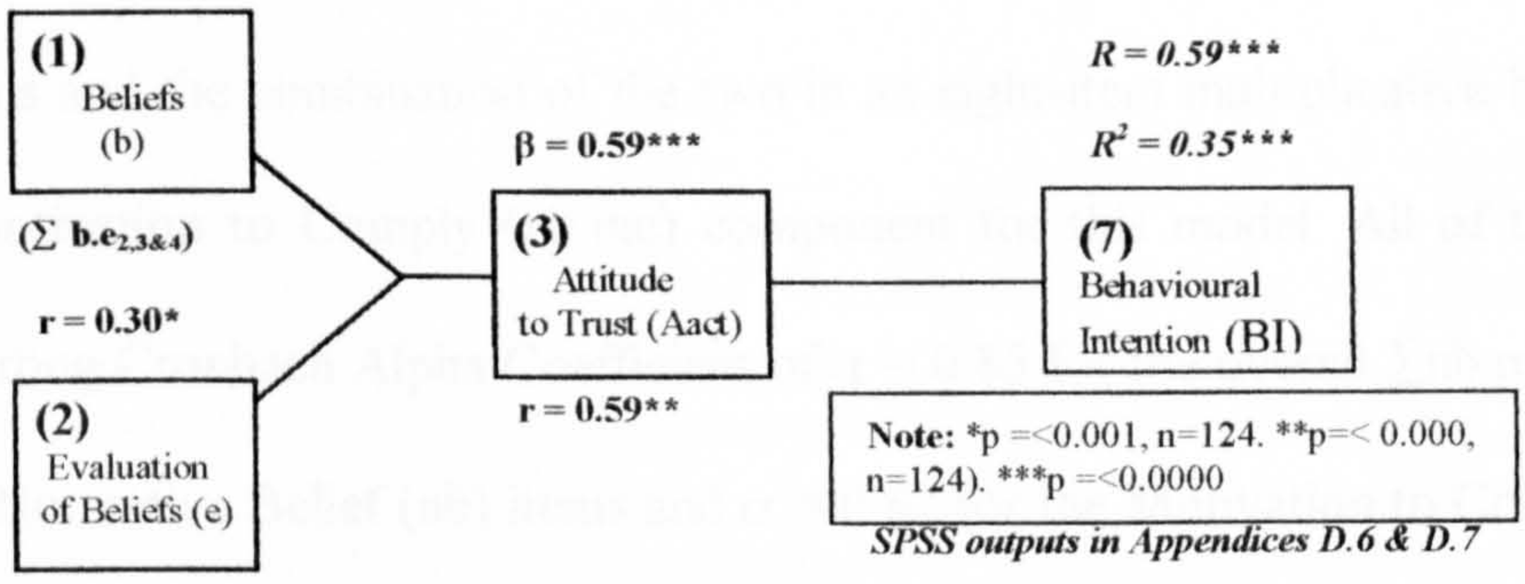
Figure 6.2: Collinearity Testing Between (b.e) Variables 1 & 3 and 1& 4.



SPSS output in Appendix D.5

On this occasion the conclusion was that, if b.e items 1 & 4 were measuring same thing as b.e items 1 & 3, results between b.e 1 & 4 would be expected to be as high as b.e items 1 & 3. This was not the case and therefore b.e item 4 was not be interpreted as being the same as b.e item 3. Analysis proceeded with the assumption that the chosen b.e items identified in table 6.3 are the best choice in this particular case. It was then possible to lay out the completed Expectancy-value model (Figure 6.3 below).

Figure 6.3 Results for the Expectancy-value Model:



SPSS outputs in Appendices D.6 & D.7

Results showed that there is a strong Multiple Linear Regression (MLR) Correlation of R = 0.59 (p =< 0.0000, *df = 122*) and that the R-square value remained satisfactory at R^2 = 0.35 (p =< 0.0000, *df = 122*) between Behavioural Intention (BI), as the dependent variable, and Attitude ($\sum Aact_{2,3\&4}$), as the independent variable. The Beta coefficient β = 0.59 (***p=< 0.0000) also indicates that attitude does play an influential part in a clients' behavioural intention (BI). Pearson's Rank Correlation Coefficient is complimentary to the Beta weighting insofar as it show a relatively strong result of r = 0.59 (**p=< 0.000, n = 124). Attitude (Aact) can therefore be said to have an affect on Behavioural Intention (BI). The remainder of the model simply shows the results already introduced above, with ∑b.e2, 3 & 4 and ∑Aact2&3 having a satisfactory correlation of r = 0.30 (p < 0.001, n = 124). This done, analysis of data surrounding normative influence proceeded. It is the combination of Expectancy-value and Normative components together that make up the Reasoned Action model.

6.2 Normative Beliefs (4), Motivation to Comply (5) and Subjective Norm (6)

This section represents *Normative Influence.* In-depth interviews and content analysis identified eight possible referents that could be used for the Normative Beliefs x Motivation to Comply (nb.mc) element of the Reasoned Action Model, to aid understanding of who influences client decision-makers' behavioural intention toward trusting contractors. Quantitative analysis of results from the structured survey using all eight referents is presented below (Table 6.4 below). This shows the results for internal consistency using Cronbach's Alpha for all eight Normative Belief items, Motivation to Comply items and the combination of the two in an eight-item multiplicative Normative Beliefs x Motivation to Comply (nb.mc) component for this model. All of the results showed a strong Cronbach Alpha Coefficient of α = 0.85 for the overall ∑nb.mc, α = 90 for just the Normative Belief (nb) items and α = 0.82 for the Motivation to Comply (mc)

items. These all comfortably exceed the $\alpha = 0.70$ requirement for the Nunnally's (1978 p.245-246) 'Rule of Thumb' for internal consistency.

Table 6.4: Cronbach's Alpha (α) and the Internal Validity of All Normative Belief and Motivation to Comply Items:

All Items Normative Beliefs x	**No. of Cases**	**No. of Items**	***Coef. Alpha (α)***
Motivation to Comply (nb.mc)	124	All 8	*0.85*
Normative Belief Items (nb)	124	All 8	*0.90*
Motivation to Comply Items (mc)	124	All 8	*0.82*

SPSS output in Appendix D.8

It was therefore safe to proceed with correlative tests between ∑nb.mc items and the SN item. Table 6.5 (below) indicates a moderate correlation of $r = 0.45$ ($p =< 0.000$, $n = 124$) (Ajzen and Fishbein 1980 p.99) between ∑nb.mc and the single overall measure of Subjective Norm (SN). At first glance, this suggests that this part of the Reasoned Action Model has been successful in determining those third parties having an influential impact upon a client decision-makers' trust behaviour toward a contractor.

Table 6.5: Sum of Normative beliefs (nb) x Motivation to comply (mc) Items Correlated With The Subjective Norm (SN) Item:

Normative Belief Items	**Pearson Corr. Coef.** *(With SN)*	**Signif-cance.** *(n = 124)*	**Pearson Corr. Coef.** *(With SN)*	**Signif-cance** *(n = 124)*	**Pearson Corr. Coef.** *(With SN)*	**Signif-cance** *(n = 124)*
1. The Architect	0.45*	0.000	0.45	0.000	*0.45*	0.000
2. Contractor's Previous Clients	0.35*	0.000	0.35	0.000	*0.35*	0.000
3. Sub-contractors of the Contractor	0.31*	0.001	0.31	0.001	*0.31*	0.000
4. Suppliers to the Contractor	0.28	0.002				
5. Your Quantity Surveyor	0.23	0.009				
6. Your Building Surveyor	0.16	0.068				
7. Engineers Involved in the Project	0.30*	0.001	0.30	0.001		
8. Colleagues in Your Firm	0.41*	0.000	0.41	0.000	*0.41*	0.000
9. ∑ of all 8 nb.mc items	***0.45***	0.000				
10. With Just ∑ nb.mc 1, 2, 3, 7 & 8			***0.48***	0.000		
11. With Just ∑ nb.mc 1, 2, 3 & 8 (Marked * above)					***0.50***	***0.000***

SPSS output in Appendix D.9

Nevertheless, through an iterative process of item selection (Shephard and Farleigh 1986 p.347), as was practised above in the expectancy-value element of the model, an improvement was made. This involved summing only the four nb.mc items 1, 2, 3 & 8

which had the highest independent correlations with SN, and deleting those which failed to meet acceptable significance levels ($p =< 0.05$), as shown in Table 6.5 (above). The correlation between Σnb.mc (1, 2, 3 & 8) and SN increases the original result of $r = 0.45$ to $r = 0.50$ ($p =< 0.000$, $n = 124$), thus giving an improved moderate correlation (Ajzen and Fishbein 1980 p.99).

With the coefficient alpha for the sum of nb.mc items 1,2,3&8 remaining above Nunnally's 0.70 rule of thumb, at $\alpha = 0.74$ (see table 6.6 below), this makes for a stronger description of the critical third party influencers affecting client decision-maker trust in their contractor.

Table 6.6: Cronbach's Alpha (α) and the Internal Validity of Iteratively Selected Normative Belief and Motivation to Comply Items:

Selected Items	**No. of Cases**	**No. of Items**	***Coef. Alpha (α)***
Normative Beliefs x Motivation to Comply (nb.mc 1, 2, 3 & 8)	124	4	*0.74*
Normative Belief Items (nb 1, 2, 3 & 8)	124	4	*0.78*
Motivation to Comply Items (mc 1, 2, 3 & 8)	124	4	*0.65*

SPSS output in Appendix D.10

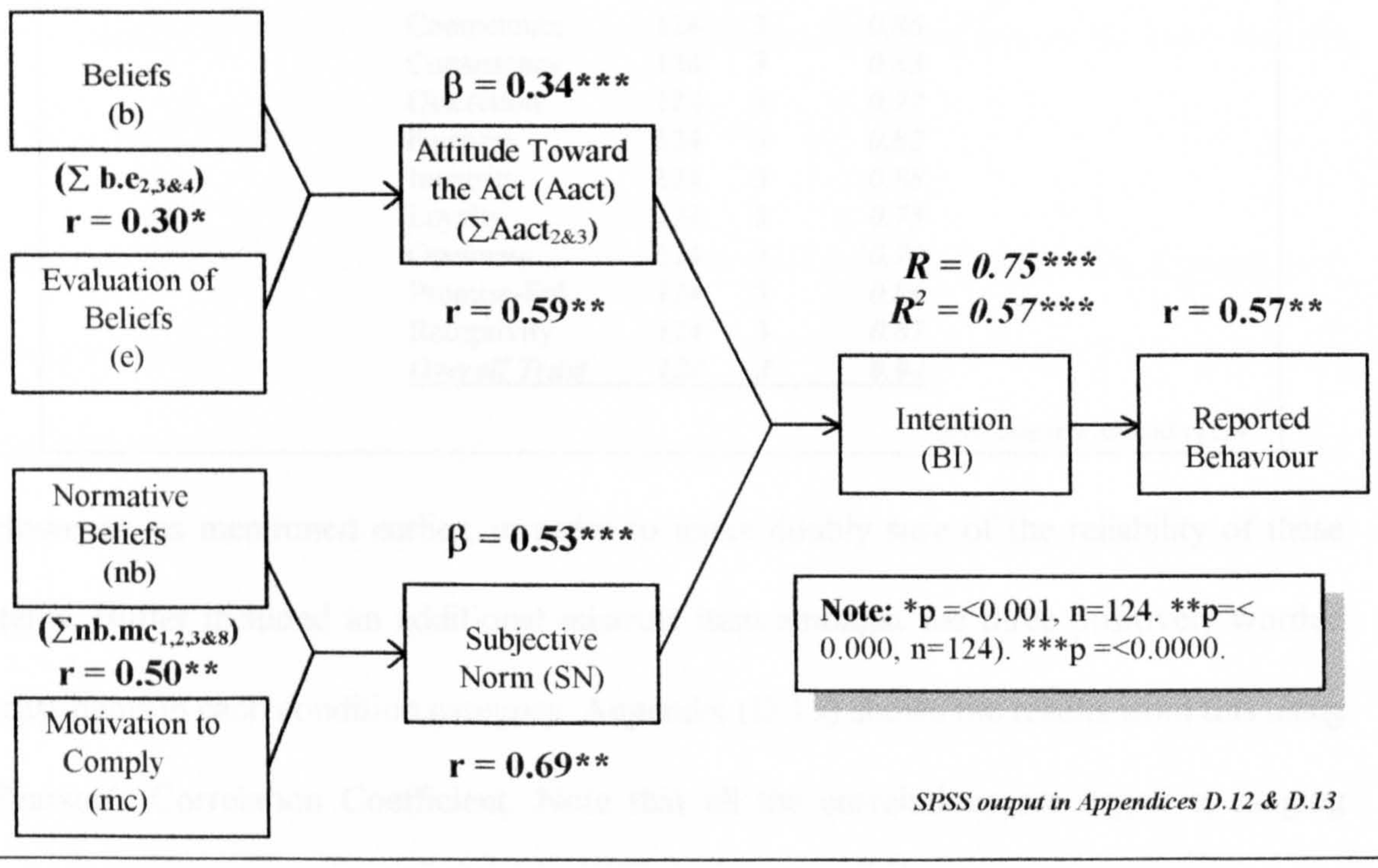
Discussion of results in this section, their significance, and how they compare with the literature will also be carried out in chapter 7.

6.3 Attitude (3), Subjective Norm (6) and Behavioural Intention (7)

This section relates to the *Reasoned Action Model.* Figure 6.4 (over the page) shows the Reasoned Action Model, independent of any modification. In accordance with Sheppard et al (1988 p.336) and Ajzen and Fishbein (1980 p.99), the predictive part of the model demonstrates a relatively strong correlation between behavioural intention (BI) and reported past experience as a measure of actual behaviour (B) with $r = 0.57$ ($p =< 0.000$, $n=124$). With regard to understanding Behavioural Intention the results are stronger with a Multiple Linear Regression (MLR) Correlation of $R = 0.75$ ($p =< 0.0000$, $df = 121$).

The R square result of $R^2 = 0.57$ ($p = 0.0000$, *df = 121*) between BI as the dependent variable and Aact and SN as the independent variables is also good (Rose and Sullivan 1993 p.177). The Beta coefficients indicate that the Subjective Norm $\beta = 0.53$ ($p =< 0.0000$) plays the greater influential part in a client's behavioural intention than Attitude ($\sum$Aact2&3), which is $\beta = 0.34$ ($p < 0.0000$). Pearson's Correlation Coefficients are complimentary to the Beta weightings in terms of ranking between Aact and SN by showing $r = 0.69$ ($p =< 0.0000$, *n = 124*) between Subjective Norm (SN) and Behavioural Intention (BI), and $r = 0.59$ ($p =< 0.0000$, $n = 124$) between Attitude Toward Act (Aact) and Behavioural Intention (BI). The remainder of the model simply shows the results already introduced above with $\sum$b.e2, 3 & 4 and $\sum$Aact2 & 3 with a satisfactory correlation of $r = 0.30$ ($p =< 0.000$, $n = 124$) (Ajzen and Fishbein 1980 p.99). Whilst $\sum$nb.mc1, 2, 3 & 8 and SN have a better correlation of $r = 0.50$ ($p =<0.000$, n=124). Standardised residuals associated with the Multiple Linear Regression (MLR) for the Reasoned Action Model are shown in Appendix D.11.

Figure 6.4: Results for the Reasoned Action Model



6.4 Conditions of Trust (8) and Overall Measure of Reported Past Trust (9)

This section relates to *Conditions of Trust.* In the questionnaire each condition of trust category contained four items (Table 6.7 below). Each item had a scale. Three positively worded items were designed to provide a multiple indicator of how contractor behaviour might influence a client's trust in relation to a specific trust category. The one remaining item in each category was a carefully worded mistrust item, there to test that the other items were consistently measuring trust in that particular category. Responses were given on five-point Likert scales, which ranged from strongly agree to strongly disagree. Table 6.7 below shows the Alpha (α) scores for the three positive items used within each of Butler's Condition of Trust Categories. These results conform to the Nunnally's (1978 p.245-6) $\alpha >= 0.70$ 'Rule of Thumb'. In fact, with three out of eleven categories over 0.70; seven out of the eleven categories over 0.80; and the overall measure of trust over 0.90 these results can be considered to be excellent (Rust and Cooil 1994 p.9).

Table 6.7: Cronbach's Alpha and the Internal Validity of Butler's Conditions of Trust

Condition Category	No. of Cases	No. of Items	*Coef. Alpha (α)*
Availability	124	3	*0.85*
Competence	124	3	*0.86*
Consistency	124	3	*0.83*
Discretion	124	3	*0.72*
Fairness	124	3	*0.82*
Integrity	124	3	*0.88*
Loyalty	124	3	*0.75*
Openness	124	3	*0.76*
Promise-Ful.	124	3	*0.86*
Receptivity	124	3	*0.87*
Overall Trust	***124***	***3***	***0.94***

SPSS output in Appendix D.14

However, as mentioned earlier, in order to make doubly sure of the reliability of these items, Butler included an additional mistrust item amongst the three positively worded trust items in each condition category. Appendix (D.15) shows the results from this using Pearson's Correlation Coefficient. Note that all the correlations are negative, ranging from r = - 0.27 (p=0.003, n =124) through to r = - 0.67 (p=0.000, n = 124). This shows

that all the positively worded items within each category were considered by respondents in the survey to reflect an opposite opinion to that of the carefully worded mistrust item. This reinforces the findings of the alpha scores and confirmed the internal consistency of all items in each of the condition of trust categories. This means the three positively worded items within each condition category accurately described issues regarding a contractor's behaviour that would build or undermine a client decision-maker's trust in them. These could then be summed and the mistrust items discarded.

Each trust category now has a reliable weighting for comparison with the overall measure of trust in order to determine the importance and ranking of each condition of trust category. With a 'perfect' (Rust and Cooil 1994 p.9) alpha score of $\alpha = 0.94$ the overall measure of trust provided a good overall measure of reported past experience for inclusion into the Reasoned Action Model. Table 6.8 (over the page) shows the correlations for each trust category against the overall measure of trust. At the bottom the sum of all the condition categories (ΣCTI) when correlated with the overall measure of trust gives the near perfect score $r = 0.89$ ($p =< 0.000$, $n = 124$). This confirmed that the condition of trust categories represent a good description of a client decision-maker's conditions of trust relating to contractor behaviour.

Table 6.8 also shows each individual category's rank order of importance. Contractors' integrity ranks highest with a correlation of $r = 0.83$ ($p =< 0.000$, $n = 124$) and availability lowest with $r = 0.51$ ($p =< 0.000$, $n = 124$). Results also show that the ΣCTI when correlated with the overall measure of past trust experience (PE) gives an excellent result of $r = 0.89$ ($p =< 0.000$, $n = 124$). This indicates that the CTI is a near perfect description of the client decision-maker's past experience (PE) where trust in the contractor is concerned. Discussion of these results, their significance, and how they compare with the literature will be carried out in chapter 7.

Table 6.8: Rank Order of Importance for Conditions of Trust Categories Using Pearson's Correlation Coefficient Against the CTI Overall Measure of Trust (PE).

Condition Categories	Rank	Pearson Corr. Coef. (with PE)	Significance (n = 124)
Integrity	1st	*0.83*	0.000
Consistency	2nd	*0.83*	0.000
Promise-Ful.	3rd	*0.82*	0.000
Receptivity	4th	*0.82*	0.000
Loyalty	5th	*0.78*	0.000
Fairness	6th	*0.73*	0.000
Competence	7th	*0.73*	0.000
Discretion	8th	*0.67*	0.000
Openness	9th	*0.67*	0.000
Availability	10th	*0.51*	0.000
Σ of all		***0.89***	**0.000**

SPSS output in Appendix D.16

6.4.1 Contractors' Intent and Ability Concerns Regarding Clients' Conditions of Trust.

Further analysis in-line with Peters and Fletcher (1997 p.529) reduced these 10 trust condition categories down into two broad dimensions. Through a process of iteration, all 10 conditions of trust categories were combined in different ways. Applying Cronbach's Alpha it was found that *Consistency, Promise-fulfilment, Fairness, Competence* and *Availability* combined produced a powerful alpha score $\alpha = 0.90$. At the same time contractors' *Integrity, Receptivity, Loyalty, Discretion* and *Openness* provide an even stronger alpha score $\alpha = 0.92$ (Table 6.9 below).

Table 6.9: Division of Trust Categories into Input and Output Contractor Behaviours

Rank	Input/Intent Dimension:
1.	Integrity
2.	Receptivity
3.	Loyalty
4.	Discretion
5.	Openness
	Alpha = 0.92

Rank	Output/Ability Dimension:
1.	Consistency
2.	Promise Fulfilment
3.	Fairness
4.	Competence
5.	Availability
	Alpha = 0.90

SPSS in Appendix D.17

These groupings support the existing literature, which shows that many of these aspects of trust have been conceptually related before (Doucette 1995 *in* Fletcher and Peters 1997 p.529). Table 6.9 above shows the groupings formed into two dimensions. One is the decision-makers' perception of contractors' *Output/Ability Dimension.* The other is the decision-makers' perception of contractors' *Input/Intent Dimension.* Findings with regard to these groupings match those found by Peters and Fletcher (1997 p.532). These results are discussed further in chapter 7.

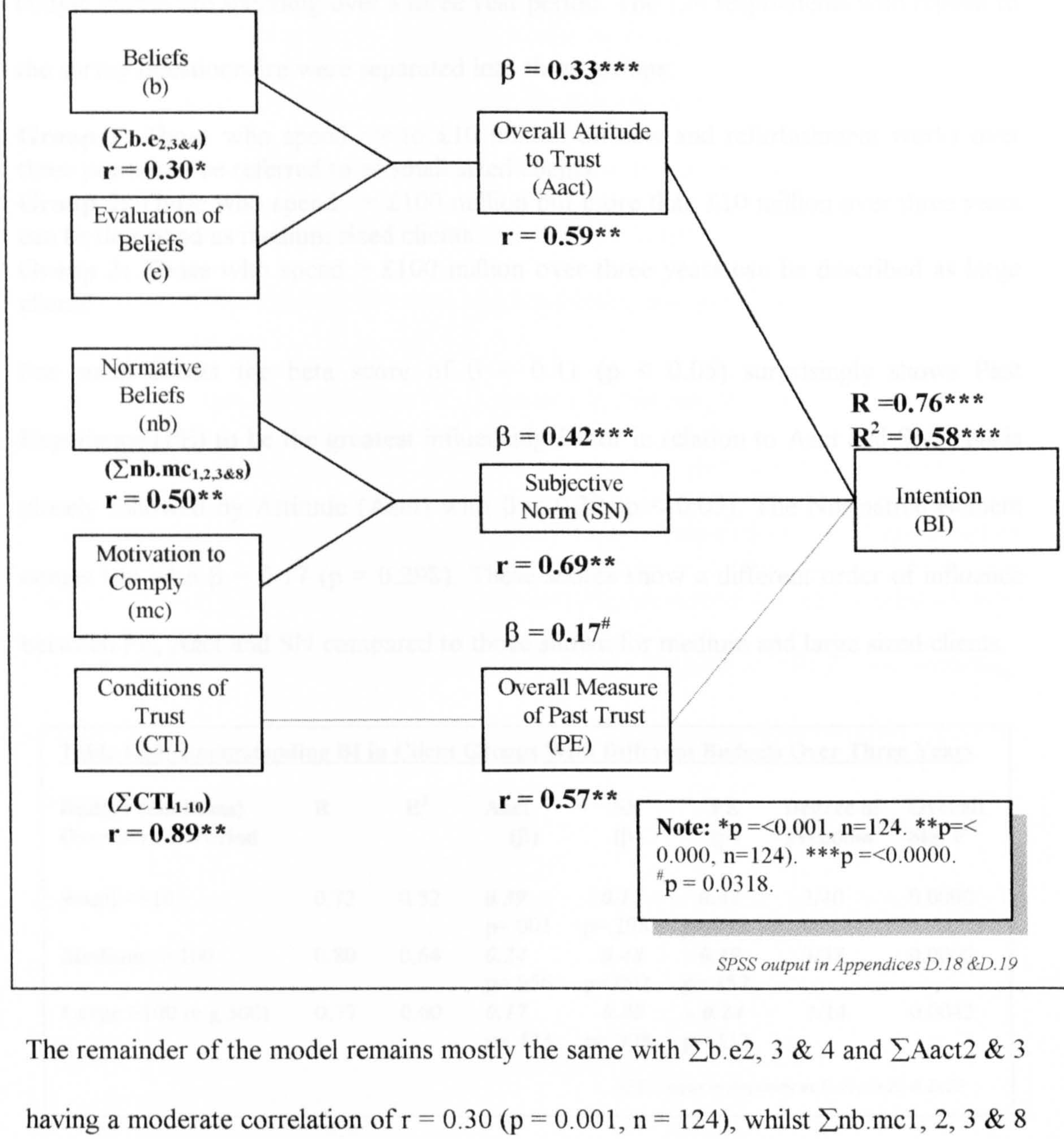
6.5 Attitude(3), Subjective Norm(6), Past Experience(9) and Behavioural Intention(7)

This section relates to *Modified Reasoned Action Model.* The CTI overall measure of trust was added to the Reasoned Action Model to create the past experience (PE) modification. Once again using Multiple Linear Regression (MLR), with BI as the dependent variable and PE joining Aact and SN as the independent variables.

This modification to the Reasoned Action Model improved the overall MLR correlation by +0.01 to R = 0.76 (p =< 0.0000, *df =120*) (Figure 6.5 over the page). The R square value went up to a strong $R^2 = 0.58$ (p=<0.0000, *df = 120*) (Rose and Sullivan 1993 p.177). This indicates that inclusion of the Past Experience (PE) helps toward understanding Behavioural Intention (BI). The revised Beta coefficient of $\beta = 0.42$ (p =< 0.0000) shows Subjective Norm (SN) still to be the dominant influence over Aact which has $\beta = 0.33$ (p =<0.000). Past Experience (PE) has $\beta = 0.17$ (p < 0.0000). The Pearson Correlation Coefficients between Aact, SN, PE and BI are complementary. Subjective Norm (SN) is still in first place with a strong correlation of r = 0.69 (p =< 0.000, n = 124) (Coolican 1994, p.296; Ajzen and Fishbein 1980, p.99), followed by Attitude (Aact) with a relatively strong correlation of r = 0.59 (p =< 0.000, n = 124). Past Experience (PE) comes third with a relatively strong correlation of r = 0.57 (p =< 0.000,

n = 124). This means that Attitude (Aact) comes second and Past Experience (PE) third, after the Normative influence (SN), where understanding client decision-maker's behavioural Intention (BI) is concerned.

Figure 6.5: Results for the Modified Reasoned Action Model



SPSS output in Appendices D.18 &D.19

The remainder of the model remains mostly the same with ∑b.e2, 3 & 4 and ∑Aact2 & 3 having a moderate correlation of r = 0.30 (p = 0.001, n = 124), whilst ∑nb.mc1, 2, 3 & 8 and SN have a better correlation of r = 0.50 (p=<0.000, n=124). These results will be discussed in more detail in Chapter 8. Standardised residuals associated with the Multiple Linear Regression (MLR) for the Modified Reasoned Action Model are shown in Appendix D.20.

6.5.1 Differences Between Client Groups According to Budget Over a Three Year Period

Table 6.10 (below) shows how the Beta scores for the three elements said to influence clients' behavioural intention vary in relation to one another depending upon the size of budget clients are spending over a three year period. The 124 respondents who replied to the survey questionnaire were separated into three groups:

Group 1: Those who spend <= to £10 million on new and refurbishment works over three years, can be referred to as small sized clients.
Group 2: Those who spend <= £100 million but more than £10 million over three years can be described as medium sized clients.
Group 3: Those who spend > £100 million over three years can be described as large clients.

For small clients the beta score of $\beta = 0.41$ ($p < 0.05$) surprisingly shows Past Experience (PE) to be the greatest influencing factor in relation to Aact and SN. This is closely followed by Attitude (Aact) with $\beta = 0.39$ ($p < 0.05$). The Normative element comes last with $\beta = 0.17$ ($p = 0.298$). These scores show a different order of influence between PE, Aact and SN compared to those shown for medium and large sized clients.

Table 6.10: Understanding BI in Client Groups With Different Budgets Over Three Years

Budget (£millions) Over 3 Year Period	R	R^2	Aact (β)	SN (β)	PE (β)	Degree of Freedom	Overall Sig. F
Small <=10	0.72	0.52	***0.39*** p=.001	***0.17*** p=.298	***0.41*** p=.018	3/40	0.0000
Medium <=100	0.80	0.64	***0.24*** p=.056	***0.48*** p=.002	***0.19*** p=.157	3/38	0.0000
Large >100 (e.g.500)	0.77	0.60	***0.17*** p=.423	***0.80*** p=.008	***- 0.24*** p=.332	3/14	0.0042

SPSS ouput in Appendices D.21; D.22 & D.23

Interestingly, the larger the client, the greater the influence Subjective Norm (SN) (or third party influence) plays. Although, these figures can only be read as indicative of a difference between the client groups, due to the sample sizes and probability scores, there is enough here to raise new questions. Questions for future research could include

client size, power or amount of experience (e.g. novice through to expert), and the effect these have on client decision-makers' behavioural intention toward trusting a chosen building contractor.

6.6 Summary

This chapter has systematically reported on the analysis of quantitative data obtained from the structured questionnaire designed for this research. All findings culminated in the final 'Modified Reasoned Action Model' shown in Figure 7.6. This was arrived at through a process of model building, starting with the 'Expectancy-value model' in Figure 7.4, followed by the ordinary 'Reasoned Action Model' in Figure 7.5.

Findings reveal that the Normative (SN) element in this research, which represents third party influence, is the dominant force affecting client decision-makers' behavioural intention toward trusting a chosen contractor. This is followed by the client decision-makers' Attitude (Aact) and beliefs toward trusting the contractor and represents what they see as being the resulting consequences. Past Experience (PE) does contribute toward the understanding of the decision-makers' Behavioural Intention (BI), however, this was found to be in third place after Attitude (Aact).

Third parties identified as having the strongest influence on client decision-makers' trust in the contractor were;

(1) the architect,
(2) colleagues from within the decision-maker's own firm,
(3) contractors' previous clients and
(4) sub-contractors of the contractor.

Client decision-makers' attitude toward trusting their contractors in future was seen as reasonable and beneficial. The main consequences of feeling able to trust their contractor in future were identified as;

(1) fewer problems with disclosure of information between the contractor, the client decision-maker's own agent, and the decision-maker themselves,
(2) less monitoring of contractor's performance in terms of quality checks would be needed and
(3) greater chance of an overall successful project.

These findings reflect the Normative (SN) dominance demonstrated, and suggest continued dependence upon an agent's opinion (most likely the architect) where trust in the contractor is concerned. This is further reinforced by the discovery that client decision-makers' own Past Experience (PE) of a contractor, whilst contributing toward their Behavioural Intention (BI), is the least influential element. This study has been successful in identifying those areas of contractor behaviour that affect either the building or undermining of client decision-maker's trust toward them throughout a project. It is evident, however, that the client decision-makers' perception of the contractors' behaviour would be strongly influenced by the referent groups identified. These points are also reinforced by the findings that the larger the client organisation, the greater the dependence there is on intermediaries or third party opinion.

The following chapter discusses these findings in more detail by comparing them with the existing literature, whilst also introducing their importance for construction marketing and management theory and practice. The chapter starts by returning to the research hypotheses set and determining which null-hypotheses will be accepted or rejected.

CHAPTER SEVEN:

A Discussion of Findings.

7.0 Introduction

Research has focused on trust as it exists in the exchange process between clients and contractors operating within the private building sector of the UK construction industry, from the client decision-makers' perspective of contractors. The literature review on trust highlights the close association made by clients, between the terms 'trust' and 'confidence'. For the purpose of understanding decision-maker's trust behaviour toward contractors, research utilised Ali's (1991p.119) four factors affecting buyer confidence when procuring professional services (Building contractor). They are: 'personal assumptions', 'reputation or referent word of mouth' and 'past experience'.

To understand client decision-makers' trust behaviour towards their contractors, logical and systematic research utilising the Ajzen and Fishbein's (1980 p.100) Reasoned Action Model combined with Butler's (1991 p.643) Conditions of Trust Inventory (Table 7.1 over the page) was carried out. This allowed for the environmental issues surrounding the client-contractor relationship. They are:

- *The complex exchange process experienced between clients and contractors operating within what has been termed the Temporary Multi-organisation (Cherns and Bryant 1984 p.181).*

- *Therefore, there is high likelihood of third party influence having an affect on client perceptions of a contractor before, during and after a project.*

- *All of this is within an industry known for its high adversarial conflict culture, constantly raising levels of perceived risk for the client, and thus effecting the clients' expectations of the possible consequences of actually trusting the contractor.*

This chapter discusses the results outlined in the previous chapter. The chapter starts by revisiting the aims, main research questions and hypotheses for this thesis. Reference is made to Null-hypotheses identifying those that are accepted or rejected. Each one is

then addressed in turn, stating what it means and how findings complement, contradict or contribute to the existing literature introduced earlier. At each stage, the discussion will also consider the implications for construction marketing theory and practice.

Table 7.1 Issues of Importance Related to Models for Statistical Results

Ali's Issues for Consideration	***Model***	***Elements***
1. Personal Assumptions	Attitude Toward the Act (***Attitudinal*** Expectations Element in Model)	(Aact)
2. Past Experience of Others **3.** Opinions Held by Others Whom Clients Respects	Subjective Norm (***Normative*** Influence Element in the Model)	(SN)
4. Client Own Past Experience	Butlers Conditions of Trust Inventory (***Experience*** Element in Model).	(PE)

7.1 Revisiting Main Aims, Questions & Research Hypotheses

Before discussing the results, original research aims are presented under Section 1.5 – Chapter One. In line with these research questions are presented in Section 1.6 – Chapter One. Hypotheses (Section 5.1 – Chapter 5) were formulated in line with the research aims, questions and chosen research models. They were designed in accordance with the prescribed format for Multiple Linear Regression and Correlation Analysis (Norušis 1993, p. 316) and they suit the purpose of the proposed 'Reasoned Action Model' combined with Butler's (1991 p.643) 'Conditions of Trust Inventory'. Additional Null Hypotheses were developed as a result of the required filtering of variables as part of the analytical process. A Table of Hypotheses, with constructs, tests used and results leading to Acceptance or Rejection of each **Null-Hypothesis** is provided in **Appendix E.1.**

7.2 Discussion of Hypotheses Findings

7.2.1 Behavioural Intention and Behaviour – Null-Hypothesis 1 REJECTED

A correlative result of $r = 0.57$ ($p=<0.000$, $n = 124$) between Behavioural Intention (BI) and Behaviour (B) falls safely within the boundaries reported by Sheppard et al (1988

p.336). They had examined some 87 applications of Reasoned Action with BI - B results ranging from r = 0.53 to r = 0.66 and stated, 'These results provide strong support for the overall predictive utility of the Fishbein and Ajzen Model'. One caveat with regard to the result in this research is that actual behaviour could only be measured in terms of what the client decision-maker had reported as having previously experienced. Correlated with a response to a conditional statement, that 'in the event that they employed the contractor again would they give them a high level of trust', this required the respondent to give a subjective estimation of their future trust behaviour. However, Sheppard et al's (1988 p.336) work identified three types of activity that can be used as a measure of intention. They were, 'Estimation of Behaviour', 'Specific Achievement of Goals' and 'Choice, Among Alternatives'. Of these, 'individuals estimates provided superior prediction of performance' (p336). The Histogram in Appendix E.2 (Relating to Behavioural Intention) shows clearly that the majority of respondents (an 80:20 ratio) agreed that they could trust their contractor in the event that they employed them in future. This result is in contrast to much of the earlier literature surrounding trust in the UK construction industry, that suggests trust does not or cannot exist in the current climate (Loosemore et al, 2000b p.455; Smit, 1995 p.23; Bennet and Jayes, 1995 p.30; Latham, 1994 p.87; Hellard, 1995 p.49 & 1988 p.xvii).

The literature (Chapter 3) reports on many issues likely to hinder development of trust relationships. The, 'proliferation of conflicts, claims and disputes in construction projects' (Kumaraswamy, 1997 p.95). The, 'phenomena of positively provoking conflict' (Loosemore et al, 2000b p.447), termed 'Confliction' (Hellard ,1995 p.49 & 1988 p.xvii). Problems of bias arising from, 'judgemental error in conditions of uncertainty' (Skitmore et al, 1989 p.105). Current 'uncondusive socio-structural environment', 'hindering attitudes toward constructive conflict management' (Loosemore et al, 2000b p.454). The

insufficient research into social science concepts and theories, such as trust, between clients and contractors (Bresnen and Marshall, 2000 p.820-21). However, more recent literature suggests that in the right circumstances trust could develop. Woodward and Woodward (2001 p.369), in an attempt to catalogue the breakdown in a trust relationship that existed between a Managing Director based at a construction company's headquarters and a Project Manager on a remote site, state, 'that multiple rather than single trust relationships are at work during a project'. Hannah (1991 p.31), in concluding on research into trust between owner, designer and constructor in the US Construction Industry, states, 'that a positive relationship exists between trust on a project and project success'. Wong et al (2000 p.804), in reporting on the nature of trust employed by three public sector infrastructure organisations in Singapore, concluded that, 'a relationship does exist between trust, the achieving of results, acting with integrity and demonstrating concern'. Although they warn that, 'an enlightened management is needed to keep the three antecedents in balance' (p.797). Much of the literature surrounding partnering, (Chapter 2), prescribes the importance of trust. As partnering becomes more important in the UK, it is possible lessons learned in the US, are taking root within the UK construction industry culture. Wilson Jr. et al (1995 p.41), reflecting on earlier reports on partnering in the US (Partnering 1991), highlight how, 'Partnering changes mindsets'. They go on, quoting Cohen et al (1992) (p.42) saying, 'values are fundamental notions of correct behaviour. Values form the foundation of an organisation's character'. They highlight (p.42), among other examples of partnering values, 'trust and confidence'. Viewed as a new way of life (p.44), they conclude that partnering is, 'a catalyst for change. Partnering is more than behavioural change it is also a cultural change that places common goals, trust and teamwork at the centre of all construction contractual agreements'. This is also recognised by Hellard (1995 p.59).

Interpretation of the findings in relation to the above literature indicates that client decision-makers' Behavioural Intention (BI) to trust a contractor is changing in the UK construction industry. The remainder of the chapter sets out to understand why this may be, by examining the consequential beliefs, referent influence and past experience.

7.2.2 Attitude Toward Act and Behavioural Intention – Null-Hypotheses 2 REJECTED

Ajzen and Fishbien (1980 p.54) state, the attitudinal component refers to the person's attitude toward performing the behaviour under consideration', it is, 'simply a persons general feeling of favourableness or unfavourableness for that concept'. East (1993 p.62) tells us, 'Attitudes are what we feel; actions are what we do'. This fulfils Ali's (1994 p.119) requirement for understanding 'Client's personal assumptions' (Section 3.1.2).

Both beta-weight and correlation results (Figure 6.6) show that Attitude (Aact) comes second to the normative influences (SN) where understanding a client decision-maker's behavioural intention (BI) is concerned. This means that the decision-maker's own personal feelings (Attitude) on the subject of trusting the contractor, whilst having an influence on their behavioural intention (BI) are strongly influenced by the advice they take from selected third parties. The affect of third party influence will be discussed in more detail later when the normative hypotheses are examined **(Hypotheses 4 & 5)**. However, this point must be remembered throughout the expectancy-value discussion.

Focusing on attitude, three items were used to help describe how client decision-makers feel about trusting their contractor. The best results were achieved when $\sum Aact_{2\&3}$, was correlated with behavioural intention (BI) on one hand, and consequential beliefs ($b.e_{2,3\&4}$) on the other. With regards their relationship with Behavioural Intention, results showed a moderately strong correlation of $r = 0.59$ ($p = <0.000$ $n = 124$) (Figure 6.5).

This was an improvement over the sum of all three attitude items, which still gave a moderately strong correlation of r = 0.54 (p =<0.000 n =124). For analysis purposes, Aact 1: 'Trusting the contractor is Important or Unimportant' was dropped. However, as Appendix E.3 shows, a large majority of respondents felt that trusting the contractor was important. For discussion purposes is appears essential that this variable be kept in the frame. However, whilst the 'importance' variable is clearly rated highly by many of the respondents, under the Beliefs-Attitude discussion (Section 7.2.3), the consequential beliefs prohibit client decision-makers from acting on this particular attitude item.

The 'Importance' measure is supported by the discovery that a majority of respondents felt that trusting the contractor was both a 'Reasonable' and 'Beneficial' thing to do (Appendices E.4 & E.5). However, the latter two items are found to be a more reliable explanation of why trust behaviour in construction (Section 7.2.1) is changing.

Trust is unexpectedly viewed in a positive way. Possibly, client decision-makers feel that for the industry to move forward, trust will need to play a greater part in the relationships they have to work within. Clearly, client decision-makers, in considering their trust behaviour towards contractors, are seeing it in a more positive light than has historically been the case. Interestingly, this transition in feeling toward trust behaviour relates closely to the experience witnessed in other industries, and much could be learnt from this and therefore important opportunity in light of Egan's (1998 chp2) views. This may also have much to do with the growing interest in Partnering.

McIvor et al (1997 p.67), in examining partnership sourcing within the auto industry, highlight findings from a major survey of UK senior managers. They state, 'that more collaborative relationships may not be easily achieved'. 'Suppliers are expected to embrace a collaborative relationship, after years of operating in a system in which trust

was the last thing they expected'. They go on to say, 'An atmosphere of suspicion, founded on previous behaviour, has caused many companies to hold back from trying to build closer relationships'. This closely reflects the situation familiar in construction. Young and Wilkinson (1989 p118), in examining marketing channel relationships between car dealers and manufacturers, stated, 'whilst co-operation existed irrespective of the level of conflict, the level of trust seemed to be generally lower when conflict was present'. However, Reckham et al (1996 p.74), in examining the partnering relationships between Mead Packaging with Pillsbury, and UPS with Kodak became, 'convinced that the same few principles of intimacy drive almost every successful partnering relationship. The shift in perspective towards a partnering mind-set occurs along three basic dimensions. First and foremost was trust, along with information sharing and the partnering team itself'. They go on to report their other work stating, 'Over 80 percent of those we interviewed pointed to trust as the most important precondition of partnering'. Anderson and Narus (1990 p.56) in examining manufacturer and distributor working partnerships, concluded that, trust is a core construct in their model. They went on to say that, 'meeting or exceeding the performance objectives through co-operation leads to trust and satisfaction with the working partnership'. As with these other industries, construction has previously had a negative perception of trust, but as with some sectors, a change in attitude may be being witnessed here.

Certainly, the importance of trust in Partnering, specifically within the UK construction industry, has been documented (Smyth and Thompson, 1999 p.1; Thompson, 1998 p.7 & 1997 p.65; Bennett and Jayes, 1995 p.30; NEDC, 1991 p.14). The problems previously faced in trying to develop better working relationships with trust are not unique to construction, and initial evidence suggests that, as with other sectors, clients in construction are learning.

Results in this section suggest that the message is getting through and things are beginning to change. The results show that client decision-makers are taking trust seriously, and are prepared to trust familiar contractors with whom they have confidence because it is seen as being a reasonable and beneficial thing to do.

If, as stated above, client attitudes are changing from one of scepticism and perceived risk, then why this is so, will be reflected in their consequential beliefs. The next section, relating to Hypothesis 3, discusses those consequential beliefs currently held by client decision-makers. Ajzen and Fishbein (1980 p.63) tell us that our attitude toward a given behaviour is determined by our beliefs, and that 'automatically and simultaneously we acquire that attitude toward that behaviour'. More specifically, we learn to like behaviour we believe possesses positive outcomes, and acquire unfavourable attitudes towards behaviour we associate with negative outcomes. This relates directly to Ali's (1994 p.118) principle of favourable and unfavourable outcomes where perceived risk is concerned. It is this part of the expectancy-value model that aids understanding of the client decision-makers' current attitude discussed above.

7.2.3 Consequential Beliefs and Attitude – Null-Hypothesis$_{0\text{-}3alt2}$ REJECTED

Fishbein and Ajzen (1980 p.7) tell us, 'attitudes are a function of beliefs'. Tuck (1976 p.83) associates beliefs with consequences arising from behaviour. East (1997 p.114) says beliefs are, 'positive or negative associations' we attach to behaviour. The Beliefs-Attitude element within this research helps to uncover what clients perceived as being the consequences (positive or negative) of trusting a contractor. This ties in with the principles of risk cognisance (Chapter 3) and relates to Ali's (1994 p.118) issue of favourable and unfavourable consequences. Currall and Judge (1995 p.165), in applying Reasoned Action to trust behaviour between Boundary Role Persons (BRPs) across organisations, described these consequences as 'types of trust behaviour'. The purpose of

Expectancy-value and Reasoned Action is to predict and understand behaviour (in this case trust behaviour). However, trust behaviour is not a phenomenon that can be observed. The researcher therefore relies on observations of actions that imply trust behaviour exists (Brock-Smith and Barclay, 1995 p.9; Smeltzer, 1997 p.42 - See Section 3.1.3, Chapter 3). Therefore, some of the consequential beliefs describe trust actions likely to occur where client decision-makers' undertake trust behaviour. These, along with non-action based consequential beliefs, explain the attitudes. The combination of consequential beliefs and attitudes, explain Behavioural Intention (BI) and Behaviour (B). Of the original seven positive and negative consequential belief items, analysis in the previous chapter identified best fit when sum-of-three items are correlated with sum-of-attitude items 2 and 3. The three items are shown below (Table 7.2 below). Each item will now be separately discussed in relation to the literature.

Table 7.2: Out of the Original Seven Positive and Negative Belief Items The Three That Fitted Best With ΣAact 2 & 3 Were;

Belief 2 - greater chance of an overall successful project,
Belief 3 - less monitoring of contractor's performance in terms of quality checks would be needed,
Belief 4 - fewer problems with the disclosure of information between the contractor, the clients own agent and the client decision maker themselves.

Removed items;

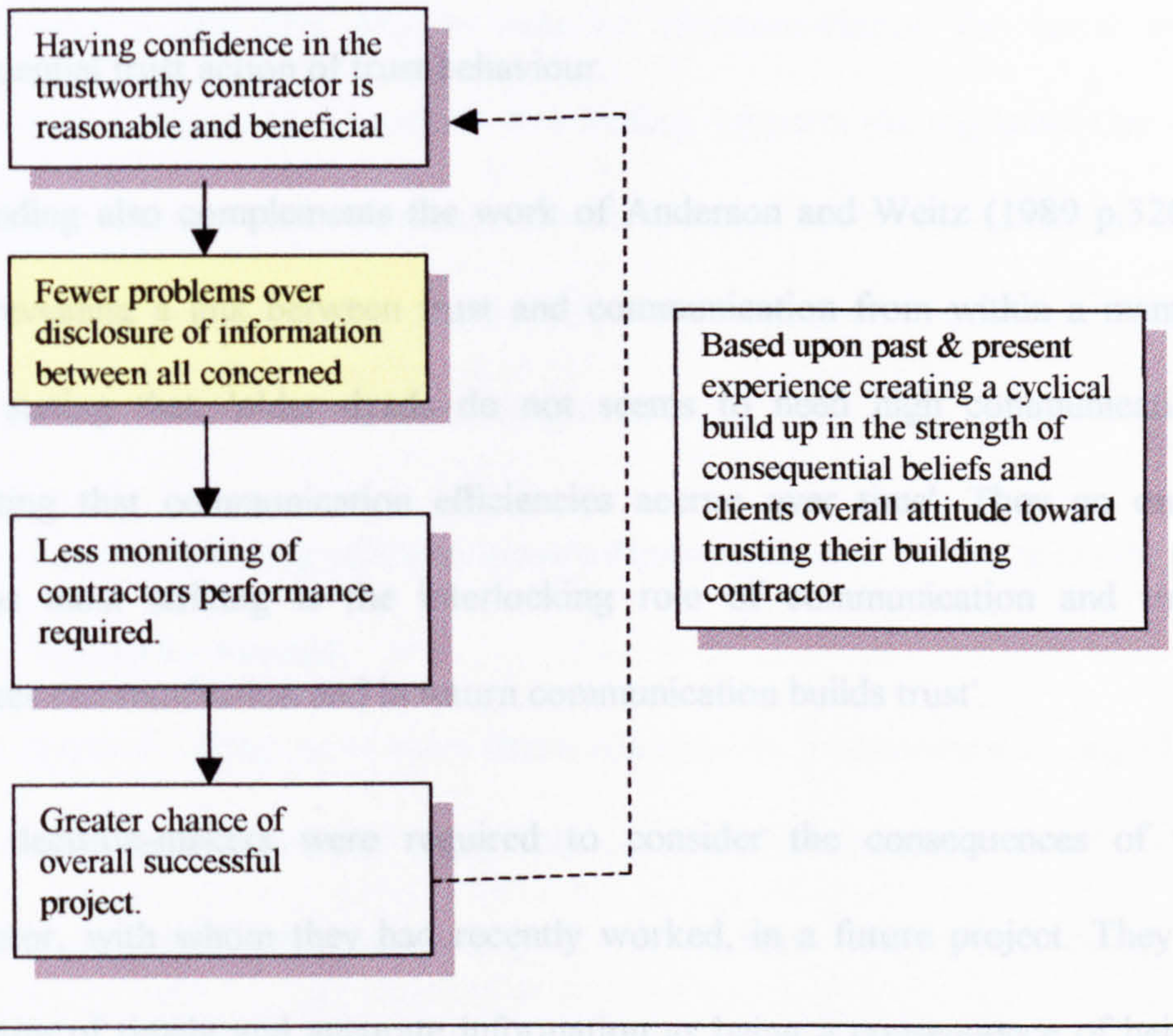
Belief 1 - that in future the client decision maker and their agent would be able to reduce the number of site visits made during the project, compared to the last time the contractor was used.
Belief 5 - that trusting the contractor places unreasonable expectations on the client decision maker to accept the contractor would perform as agreed.
Belief 6 - the client is more likely to be taken advantage of in terms of amount of profit contractor makes.
Belief 7 - Contractor more likely to behave opportunistically with regard to claims

7.2.3.1 Fewer Problems with Disclosure of Information Between the Contractors, My Agent and Myself

The results (Table 6.3 Chapter 6) suggest that for clients, fewer problems with disclosure of information between parties is currently the number one consequence of what is considered to be a beneficial and reasonable trust relationship (Figure 7.1 over the page)

between client and contractor. No causal relationship can be guaranteed with correlative data, however, these results suggest that clients feel that having confidence in their contractor is beneficial, because, disclosure of information between the contractor, the client and the client's agent would be easier, leading to less need for monitoring the contractor's performance in terms of quality checks, and ultimately, a greater chance of an overall successful project. This also accounts for the attitude that trusting the contractor is reasonable.

Figure 7.1 - Perceived Consequence of Confidence-Based Trust Toward Trustworthy Contractor.



The Bovis and Vodafone development of Vodafones' new headquarters supports this result. Here there is an attempt to carry out the project 'in a spirit of co-operation and trust', 'the first day on site for Bovis was a one-day team building meeting with the project management, design team and client' (Greeman 2002 p.19).

The results in relation to 'disclosure of information' also complement the literature regarding both 'behavioural' and 'co-operative based trust' (Chapter 3). Firstly, it represents a trust action in the form of 'communication openness' (Brock-Smith and Barclay, 1995 p.9; Smeltzer, 1997 p.42), in which parties to the project would be expected to participate in the 'formal and informal sharing of timely information between partners'. In fact, Smeltzer (1995 p.43) went further by showing how poor communication behaviour by suppliers erodes buyer trust. This finding therefore complements the work of Currall and Judge (1995 p.165) whose application of Reasoned Action also revealed 'open and accurate communication' as being a consequential trust action of trust behaviour.

This finding also complements the work of Anderson and Weitz (1989 p.320) in their study revealing a link between trust and communication from within a manufacturing sector stating that, 'older dyads do not seems to need high communication levels, suggesting that communication efficiencies accrue over time'. They go on to state, 'Perhaps most striking is the interlocking role of communication and trust. Trust facilitates communication and in return communication builds trust'.

Client decision-makers were required to consider the consequences of trusting a contractor, with whom they had recently worked, in a future project. They identified disclosure of timely and accurate information as being a consequence of being able to trust the contractor. This finding when compared with the literature suggests, as with manufacturing, where trust is allowed to develop, effective communication becomes more efficient over time.

In Anderson and Narus's (1990 p.50) study of working partnerships they showed a positive link between communication, co-operation and trust, said to be based, on one

group's past and present experiences of the other. The effect of 'Past Experience' (PE) is examined separately in relation to overall 'Behavioural Intention' (BI). However, for now these results and the literature suggest that it could be having a more direct effect within decision-maker's personal attitudes here.

These findings also support the view by Reckham et al (1996 p.74) (Discussion of **Hypothesis 2)** that a shift in perspective towards a partnering mind-set occurs through trust along with information sharing. The result indicates that effort may be being taken to reverse the self-perpetuating cycle of unwanted conflict by complying with Loosemore et al's (1999 p.186) first dispute reducing recommendation for better information management (Chapter 3). Therefore, this finding supports the argument that clients are beginning to change their intentions toward trusting contractors (Section 7.2.1), and complies in part with Schlenker et al's (1973 p.419) definition of trust regarding, 'reliance upon information received from another person'.

7.2.3.2 Less Monitoring of Contractor's Performance in Terms of Quality Checks Would be Needed

Results (Table 6.3 Chapter 6) show that a reduction in monitoring with regard to quality checks could be a benefit of being able to trust the contractor based on improved disclosure of timely information (Fig. 7.1 & Section 7.2.3.1) and, hence, could be considered a reasonable thing to do. This consequential expectation by client decision-makers' also relates to points raised in the trust literature (Chapter 3). Specifically, 'behavioural' and 'confidence based trust'. It represents a trust action, in the form of 'control reduction' (Brock-Smith & Barclay, 1995 p.9) where the client would, 'withhold use of power in the relationship', such as, regular and possibly increasing rates of monitoring and control. This complements Currall and Judge (1995 p.165), who

recognised the absence of the non-trusting action of 'surveillance', where it negatively correlated with trust between parties.

One caveat is that correlation in this part of the model is weaker compared to other parts. Discussion later, in line with Chang's (1998 p1828) principle of linkages between components of the Reasoned Action Model, will examine the dominant role played by referent groups where trust is concerned. This, combined with better communication, may simply mean clients are happy to reduce their own monitoring and control in favour of relying more on the actions and word given by one or more of their key referents.

Putting the last point aside for the time being, if control reduction is genuinely possible, this then complements the work of Moorman et al (1992 p.315, 1993 p.82), who defined trust as, '...a willingness to rely on an exchange partner in whom one has confidence'. It also relates to the work by both Ali (1994 p.118) and Mayer et al (1995 p.713) where confidence towards another party regarding their ability and intention to produce some 'positive' or 'beneficial' event rather than a negative one occurs (Sections 3.3.1 and 3.1.2, Chapter 3). Michell et al (1998 p.160) also linked trust with, amongst other variables, 'confidence, dependability and quality standing'.

7.2.3.3 Greater Chance of an Overall Successful Project

This represents the third and final belief item to be drawn from what had originally been seven. It shows that client decision-makers' recognise the potential for success in a project where trust is allowed to develop. This suggests that where client decision-makers are able to trust their contractor the consequence would be a successful project, and this makes it a reasonable and beneficial risk to take. As with the previous belief items it also complements the literature. Specifically in the areas of 'behavioural' and 'co-operative based trust' (Chapter 3).

In behavioural terms, this belief item represents a trust action in the form of 'positive attitude' (Smeltzer 1997 p.42). This is reflected in its relative importance compared to weaker/negative belief items when correlated with the attitude. However, as with belief item 2 there is a caveat. Whilst it is one of the more useful consequential beliefs for descriptive purposes, there is still has a weak correlation ($r = 0.21$ p, 0.05) between this and the sum of Attitude items 2&3. Talking about a successful project is a broad statement that can be interpreted in many ways. It could relate to contractor performance or low levels of conflict. It could be defined in terms of contribution the project has made toward achieving a client's broader goals that gave rise to the need for building project in the first place. It could also mean that clients are simply aware of the potential for success (however that many be defined) where they are prepared to trust the contractor.

Nevertheless, a link has been made between client trust and success of the project and this complements other research findings, such as Wong et al (2000 p.804), who concluded that amongst other points, a relationship exists between trust and the achievement of results. It supports the work of Anderson and Narus (1990 p.56), who showed a similarly weighted correlation between 'trust and satisfaction' ($r = 0.25$ p <0.05) and concluded that, 'meeting or exceeding performance objectives through co-operation leads to trust and satisfaction with the working partnership'. It also successfully compares with the work of Hannah (1991 p.31) who, having examined trust within the US construction industry, also concluded that, 'a positive relationship exists between trust on a project and project success'. More importantly, Hannah (p.11) illustrated how, 'Accurate, timely and comprehensive info' linked trust with an overall successful project'. This last point not only supports the interpretation of findings above (Section 7.2.3.1 & Figure 7.1), it also supports the idea that lessons learned in the US may be taking root within the UK construction industry (discussion re: **Hypothesis 1**).

7.2.3.4 Discussion in Relation to Removed Belief Items

Removed items also provide potential for understanding client decision-makers' current attitudes toward trusting contractors. The four items removed (Table 7.2) also relate to the literature, most specifically to the areas of 'cognisance of risk', 'behavioural' and 'co-operative based trust' (Sections 3.1.1; 3.1.3 and 3.1.4 - Chapter 3). Links can also be drawn with the literature surrounding problems undermining the effective development of confidence-based trust in the UK construction industry (Section 3.2 - Chapter 3).

In terms of 'cognisance of risk', results showed that those consequential belief items (Table 7.2) that represent risk for the client decision-maker (b.e. items 5, 6 & 7) all negatively correlated with sum of attitude items 2&3 (Table 6.3 - Chapter 6), revealing a distinct contrast to the other consequential belief items. This suggests that any concerns the client decision-maker might have about the contractor behaving opportunistically, by taking advantage where profit is concerned, or concerns about contractor performance, are negatively related to clients' current attitudes that trusting the contractor is both a reasonable and beneficial thing to do. Ali (1994 p.118) states, 'we acquire unfavourable attitudes toward behaviour we associate with negative outcomes', and as these results support, the idea that likewise we, 'learn to like behaviour that we believe possess positive outcomes' (Section 7.2.3.2). It is possible that the client's previous experience of the contractor has resulted in reducing any suspicion, that causes many companies to hold back where the building of closer relationships are concerned (McIvor et al 1997 p.67). The affect of past experience is discussed in detail later (Section 7.2.6 *ff*). For now, it is argued that trust levels are higher because the client's expectations of conflict are lower than those for positive outcomes if working with the same contractor in future (Young and Wilkinson (1989 p.118). This may be derived from the client's belief that in working with this particular contractor, a relationship between the contractor's integrity

and their trust has been allowed to develop (Wong et al 2000 p.804 – Section 7.2.1). These results also complement, Nooteboom et al (1997 p.309) and their definition of trust being, the 'willing reliance on other parties not to undertake opportunistic behaviour'. Whilst results are weak, they suggest that contractor opportunism is less of a concern than was expected. The results also reflect the findings by Anderson and Narus (1990 p.53) that, with satisfaction on the part of the trustor, there was a strong negative correlation with issues of conflict. Although, in the case of client decision-makers' the negative correlative results are not strong, they are, nevertheless, present.

In terms of behavioural-based trust, belief 1 is directly related to the idea of '*control reduction*' (Brock-Smith and Barclay, 1995 p.9). The results (Table 7.3 - Chapter7) showed a weak correlation between clients' willingness to reduce the number of site visits in future and the attitude of trusting the contractor being reasonable and beneficial. This presents a dichotomy when compared to clients' willingness to reduce monitoring of contractors' performance in relation to quality checks. It suggests that client decision-makers generally are undecided as to whether reducing the number of site visits is a reasonable and beneficial thing to do. If this is the case, then what purpose would site visits play if quality checks are not the issue? Given the nature of the other positive consequential belief items, it is possible that continuing levels of site visits are viewed as being conducive to good communication, where the disclosure of timely information between the contractor, client's own agent and the decision-maker themselves, is concerned. It may also be that it acts as some form of on-going protection against '...increasing one's vulnerability to another whose behaviour is not under one's control' (Zand, 1972 p.230). This inconsistency on the issues of 'control reduction' by clients seems to suggest the continued existence of slight suspicion and maintained guardedness (Kee and Knox, 1970 p.358). If this is the case, it suggests that current willingness on

the part of client decision-makers to trust contractors is more to do with experimenting with trust rather than representing a final and decisive change in 'mind-set' (Wilson Jr. et al, 1995 p.41 - under **Hypothesis 1**). This would support the notion that practices such as partnering are a catalyst for change, both at a behavioural and a cultural level (p.44), which places issues such as, 'common goals, trust and agreement at the centre of all construction contractual agreements'. However, as Loosemore et al (2000 p.455) highlight, currently the industry's contractual practices provide little incentive for change and that, where such a change be allowed to develop, it would create greater affinity for a collective responsibility, trust, goodwill and confidence within the UK construction industry. It is therefore, possible that responses given to beliefs 5, 6, & 7 might have more to do with, 'avoiding allocation of blame' (Loosemore et al, 1999 p.186). A client may deliberately be avoiding accusations of contractor's opportunistic behaviour in support of an aggressive bargaining stance, in order to give the contractor a less hindered opportunity to prove trustworthiness. What this indicates is that trust will not develop immediately just because it is prescribed as being of central importance to strategies such as partnering. Rather it will take time to develop and needs to be managed carefully on the part of clients and contractors if it is to succeed. This would explain why the selected consequential beliefs correlated better with only sum of Attitude 2 & 3. Clients may well be prepared to recognise the importance of trust (Appendix E.3), but they are still asking themselves whether it is reasonable and beneficial to do this under the current environment and culture of the UK construction industry.

7.2.3.5 Summary of Discussion for Results Relating to Expectancy-value Model.

This section discussed results relating to the Expectancy-value element of the Modified Reasoned Action Model. Relating to **Hypotheses 1, 2** and **3**, it examined client decision-makers' attitudes and willingness to trust a contractor. It revealed those attitudes that

best explain current feelings towards this action, whilst revealing those perceived consequences that best help the understanding of current attitudes. This complies with Ali's (1994 p.119) principle of 'Client's personal assumptions' (Section 3.1.2). Interpretation of results was been done in close conjunction with current literature.

The findings reveal a change occurring in client decision-makers' (CDM's) future willingness to trust a contractor with whom they have had previous experience. Results in relation to the literature show how CDM's recognise the importance that trust can play within the relationship they have with contractors. They also recognise the link between being able to trust their contractor and the greater likelihood of a successful project. However, at this time they are being cautious, choosing to experiment with just how reasonable and beneficial it is to trust contractors within the current culture and climate of the UK construction industry. This is revealed in findings related to what they currently perceive as being the main consequences of trusting the contractor. The findings demonstrate that in terms of 'trust actions' the client decision-makers may be prepared to reduce levels of control in monitoring contractor performance on quality, if there can be better communication in terms of disclosure of timely information between the clients, their agents and the contractors. These findings complement those in the attitudinal part of Currall and Judge's (1995 p.165) application of Reasoned Action to trust behaviour. Executed in the US Public School Sector between inter-organisational Boundary Role Persons' (BRPs), they also revealed an association between 'trust', 'open and honest communication between BRP counterparts' and how 'low levels of surveillance manifests high trust'. Whilst language used to describe events, are sector specific, the underlying trust actions are similar to those identified above between clients and contractors. However, Currall and Judge's (1995 p.165) other findings relating to 'Task Co-ordination between BRPs' and willingness to enter into 'Informal Agreements'

were not reflected within the client-contractor results. This may have more to do with the complexity of the exchange processes in construction. However, Lane and Bachmann's (1996 p.389 - Section 3.2.2 - Chapter 3) conclusions in relation to inter-firm relationships stated that, 'obligatory relationships based on goodwill trust are relatively rare'. 'Risk is instead reduced by trust based on commonality of expectations'. This suggests that trust relationships between clients and contractors are simply at an earlier stage, with participants still allowing the formalised contracts, norms and procedures, that dictate exchange arrangements in the technical aspects of a project, to impede the social managerial aspects of relationships between clients and contractors. Also referred to as the 'Engineers Paradigm' (Section 2.1.3 - Chapter 2), this seems a likely explanation given Hannah's (1991 p.11) work within the US construction industry, which showed how trust leading to a successful project is realised by, amongst other things, 'more dependence, *less procedure* and greater commitment'.

This idea is further reinforced by the simultaneous lack of agreement, by client decision-makers, as to the merit of reducing the number of site visits made compared to previous projects. Furthermore, concerns of opportunistic or unfair behaviour on the part of the contractor, whilst, negatively correlated with the positive intention to trust them in future, still remain unresolved. This suggests that where the client can trust the contractor there is less concern about the contractor behaving unfairly, and therefore less likelihood of conflict breaking out. Although the weak results suggest there still remains a lack of agreement across all client decision-makers as to just how reliable the contractor can be. Nevertheless, the evidence suggests that clients are beginning to try and reverse the cyclical build-up of conflict that has hindered any possibility of positive exchange relationships in the past. This indicates an attempt to avoid falling back on risk reducing strategies employed in the past, possibly giving contractors the benefit of the

doubt by avoiding confrontation through accusations of poor practice by contractors. This, combined with the need for greater open and effective communication, suggests clients are giving certain contractors whom they are familiar with a relatively unhindered chance to demonstrate trustworthiness. Discussion of results in relation to the literature suggests that this has much to do with the growing importance that partnering has to offer. However, the findings also suggest that this change in mind-set to one of trust is still not without some suspicion and some maintained caution. A point reflected in the need by the client to be assured that communication between all parties concerned is both efficient and effective. This supports the findings to be discussed next, which show that third party (normative) input is the dominant influence where willingness to trust the contractor is concerned. This reflects the primary need on the part of clients to depend upon the opinions of selected referents in support of their own attitudes (feelings) towards trusting the contractor in future. It also supports the idea that the development of trust cannot occur immediately, just because it is prescribed as being important. It must be allowed to develop over time with careful and enlightened management on the part of contractors, clients and key client advisors.

Discussion of findings will now look at who the key referents are, and their role in determining the CDM's perceptions of a contractors' trustworthiness. Relating to **Hypotheses 4 & 5**, the *Normative* (SN) element in this research is introduced, which, when added to the Expectancy-value creates the Reasoned Action Model. The discussion will take into account the literature and will reflect Chang's (1998 p.1828) point that, 'a number of studies have shown (Shepherd and O'Keefe,1984; Shimp and Kavas, 1984; Vallerand et al, 1992) that attitudinal and normative structures are not independent; subjective norm (SN) was found to influence attitude'. Therefore, linkages between constructs found in both elements of the model will be made.

7.2.4 Subjective Norm and Behavioural Intention – Null-Hypothesis 4 REJECTED

Ajzen and Fishbein (1980 p.57) state, 'In addition to measuring the person's attitude toward the behaviour, it is also necessary to assess their subjective norm in order to predict and understand intention'. The inclusion of a *'Normative'* component with Expectancy-value creates the 'Reasoned Action Model'. This component, 'deals with the influence of the social environment on intentions and behaviour' (p.57) or, 'the person's perception of the social pressures put on them to perform or not perform the behaviour in question' (p.6). Tuck (1976 p.87) refers to this part of the model as pressure brought to bear on a person's behaviour resulting from, 'what others expect one to do'. This relates to Ali's (1994 p.119) principle of 'opinion held by others' (Table 7.1).

Both Beta-weights and correlation results (Figure 6.5 & 6.6 - Chapter 6) show the Subjective Norm to be the dominant influence over Attitude on a client decision-maker's Behavioural Intention (BI) toward trusting the contractor. Furthermore, regression results showed a dramatic improvement (+0.22) in the overall R square value when compared with the basic Expectancy-value Model (Figure 6.4 - Chapter 6), raising it to a highly significant, $R^2 = 0.57$ ($p<=0.0000$) (Figure 6.5 - Chapter 6). In accordance with Rose and Sullivan (1993 p.177) this can be considered an excellent result. Therefore, **Alternate Null-Hypothesis 4 $H_{0\text{-}4alt}$** is clearly rejected. The findings strongly support the suspicion that select third parties play the dominant influence in whether or not a client is likely to trust a building contractor. It further reinforces the idea that, within the TMO third party influence can have an impact on clients' perception of a contractors' trustworthiness during a project and, through reputation, in referral markets (Thompson, 1996 p.86). It also supports the assertion that problems of client suspicion and perceived risk toward contractors when considering the question of trust, may well be developed through inter-group dynamics where positive or negative client perceptions of the

contractor are amplified through intermediary influence (Labianca et al, 1998 p.62). Precisely how this works, depends on who the key referents are, and thus the nature of their influence. This is addressed later under **Hypothesis 5**.

In comparing with the attitudinal component of the model (Aact - under **Hypotheses 2 & 3)**, it can be argued that client decision-makers are dependent upon a dominant referent influence. They are relying on third party opinion whilst lacking the confidence to be self-reliant in their decision to trust the contractor or not (Clark & Payne, 1995 p.7). This relationship between the attitudinal and normative findings is further reinforced by Hannah's (1991 p.11) work in the US Construction industry. As with, 'disclosure if timely information' (Section 7.2.3.1, Figure 7.1 & Section 7.2.3.3) she illustrates how trust and project success are also linked by, 'more influence from others'. This interpretation is reinforced further by Mangold et al (1999 p.74), who highlighted how many studies have attributed normative social influence with purchasing behaviour, stating, 'informational aspects of social influence may also have a substantial impact' (p.74). They also refer to research which suggests that word-of-mouth lends itself to the communication of subjective information such as quality, rather than objective types of information such as price (Houston 1979, Murdock 1981a, 1981b). These points match precisely with those consequences identified in the Expectancy-value component of the Reasoned Action Model. This further validates all findings so far.

A contractor's ability to develop trust from the client is strongly dependent upon word-of-mouth. Combine this with the Labianca et al's (1998 p.62) principle of heightened inter-group dynamics and it can be seen how trust in a contractor can be made difficult for clients, and how perceived risk can easily escalate along with the potential for conflict. According to Mangold et al (1999 p.75), 'word-of-mouth in the market place has focussed on negative, rather than positive communication'. This is engaged for

reasons like dissatisfaction and the service providers' poor responsiveness to complaints (Richins, 1983). Blodgett et al (1993) talks about negative word of mouth and the customer's perception of justice relating to complaints. These are issues that come up later within the conditions of trust (Section 7.2.7.1). For now, it shows that whilst intermediary influence in trust development may be helpful, it can be very damaging. When one considers the history of relationships experienced in the UK construction industry, it highlights why dependency on third party influencers has become so dominant as to be almost surrogate over a decision makers own beliefs and attitudes where trusting the contractor is concerned. Through these referent groups the *focal* relationship shown between client and contractor (Figure 2.1 - Chapter 2) in relation to trust is immediately compromised. The problem is compounded if consideration is also given to the work of Bennett (1999 p.104). Here it was found, in other sectors, that there is danger client decision-makers relying on third-party opinion will organise and structure their thoughts and activities (in this case around their trust of the contractor) based upon quickly made judgements with little thought.

Another concern for the contractors is that their ability to develop trust is dependent upon factors such as the clients' own source credibility (Giffin, 1967 p.104). To what extent does the client trust the referent source? Whilst trust relationship between clients and referents is not under scrutiny in this research, some discussion of the key referents in relation to the literature may reveal issues likely to be confronting both clients and contractors. Individual referents identified will be discussed later. On a general level, Weiner and Mowen (1986 p.307) cite numerous empirical studies on the relationship between source credibility and attitude change (in this case toward trusting the contractor). They go on to state, 'that trustworthiness is one of the components of credibility'. Where some simply pursue their own interests (Section 3.2.6 - Chapter 3) or

betray client confidence in them (Deutsch, 1960 p.123; Elangovan and Shapiro, 1998 p.547), then the contractor is placed in a very difficult situation. Especially where referents are motivated to, 'obtain maximum gain at minimum cost to themselves', without regard for other co-operators, in order to suit their own interests.

In order to develop clients' trust more directly, the contractor must either find a way around the intermediary influence or, 'rely upon the communication of another party in order to achieve the desired effect'. However, the credibility of the parties can be perceived in very different ways, thus affecting client perception of the contractor. Another factor to consider is reputation through word-of-mouth. Fombrun (1996 p.3) says, 'a reputation embodies the history of other peoples experiences with that service provider. Good reputation increases credibility, making us more confident that we will get what we are promised', therefore, not only does the CDM's own past experience count, but everybody's experience with whom the contractor has had dealings with, may also affect client trust toward the contractor. Where the client decision-maker has not experienced working with a contractor, all of these above issues would be problematic. The risk-confidence continuum (Figure 3.1), combined with the schematic model of cyclical market behaviour (Figures 2.1), provides a good insight into what is likely to be happening where client trust in the contractor is concerned.

The difficulty faced by the contractor is in overcoming the divide that exists between themselves and the client. The 'Conditions of Trust Inventory (CTI - under **Hypotheses 6 & 7)** highlights a number of areas of contractor behaviour which contribute toward the development, or undermining, of client trust. However, even though the client decision-maker reports Past Experience (PE) of contractor behaviour in line with CTI criteria, they continue to rely more upon third party opinion than their own attitude and experience where trusting the contractor is concerned. Due to the focal relationship that

exists between client and contractor, combined with salient referents currently playing the dominant role in influencing client decision-maker trust behaviour, there exists a trust-gap. This must be managed, or closed, before clients' past experience, and the benefits derived from past experience (PE), start to have a greater influence. Currently, dependence upon referent influence may be due to the complexity of a construction project and the risks involved. This would comply with ideas about how relationships can be used in reducing complexity from a management point of view (Ford et al, 1998 p.59). Ennew & Ahmed (1999 p.687), in examining business banking and life assurance products, go further by saying, 'as complexity increases there is evidence of a greater reliance on (expert) referral channels'. What is also possible is that, in construction management there still remains a lack of awareness about how to evaluate the trustworthiness of a contractor. Conditions of Trust Inventory (CTI) may have a lot to do with aiding this.

The problem now is one of how contractors manage the current situation. Previous research has been dominated by studies on the role of word-of-mouth communication, highlighting its importance in different ways (Mangold et al, 1999; Buttle, 1998; Zand, 1972; Giffin, 1967). Construction management literature has identified criteria such as reputation to be responsible for influencing choice of contractor when clients pre-qualify contractors for short-lists or award contracts (Jennings and Holt, 1998 p.657; Bartram, 1996 p.25; Fellows and Langford, 1993 p.8; Baker and Orsaah, 1985 p.31,). Now, these results have identified third party influence as the dominant element influencing client trust toward their own contractor. At the same time, the most likely key referents have also been identified. However, where word-of-mouth or referral communication are concerned, 'the potential and processes for managing such activity have received little attention' (Ennew and Ahmed, 1999 p.671).

Clients and contractors must now address is how these different groups should, or can, be managed, if trust between clients and contractors is to improve. What must be understood is that, where influencing trust is concerned the four referent groups are all very different, for a number of reasons. Providing insight into these differences will help both clients and contractors understand the affect these referents having, and thus provide some basis for better developing their part in an overall trust building strategy.

Findings in relation to **Hypothesis 5** will now be discussed, highlighting once again who the key referents are, and in relation to the literature, what influence they may be having on client decision-makers' trust behaviour toward contractors.

7.2.5 Normative Referents and Subjective Norm – Null-Hypotheses 5 REJECTED

Ajzen and Fishbein (1980 p.74) state, 'As in the case of behavioural beliefs (see **Hypothesis 3**), we can elicit a person's salient normative beliefs'. These reflect referents identified by the person considering the behaviour, asking themselves 'who thinks I should (or should not) perform the behaviour' (p.73). Respondents in a survey will be asked to what extent they would comply with the opinions of these referents. This is referred to as 'motivation to comply'. The combination of these referents, and a respondents 'motivation to comply' with their opinions, allows the researcher to identify those referents that best describe the Social Norm (SN) experienced by respondents. Referents can be 'other persons or agencies (East, 1990 p.86), 'reference groups or individuals' (Miniard and Cohen, 1981 p.311). Therefore, for Client Decision-maker key referents could come from any element of the TMO. Of the original eight possible referents, analysis (Chapter 6) identified best fit when sum of referents 1,2,3&8 ($\Sigma nb.mc_{1,2,3\&8}$), were correlated with *Subjective Norm* (SN). The four key referents are shown below (Table 7.3 over the page).

Table 7.3: Key Salient Referents

Out of the original eight salient referents the four that fitted best with the overall measure of Subjective Norm were;

Referent 1 – The Architect
Referent 2 – Contractor's Previous Clients
Referent 3 – Sub-contractors of the Contractor
Referent 8 – Colleagues in the Decision-Makers Own Firm

Removed Salient Referents;

Referent 4 – Suppliers to the Contractor
Referent 5 – Quantity Surveyor Acting For Client
Referent 6 – Building Surveyor Acting For Client
Referent 7 – Engineers, Involved in the Project

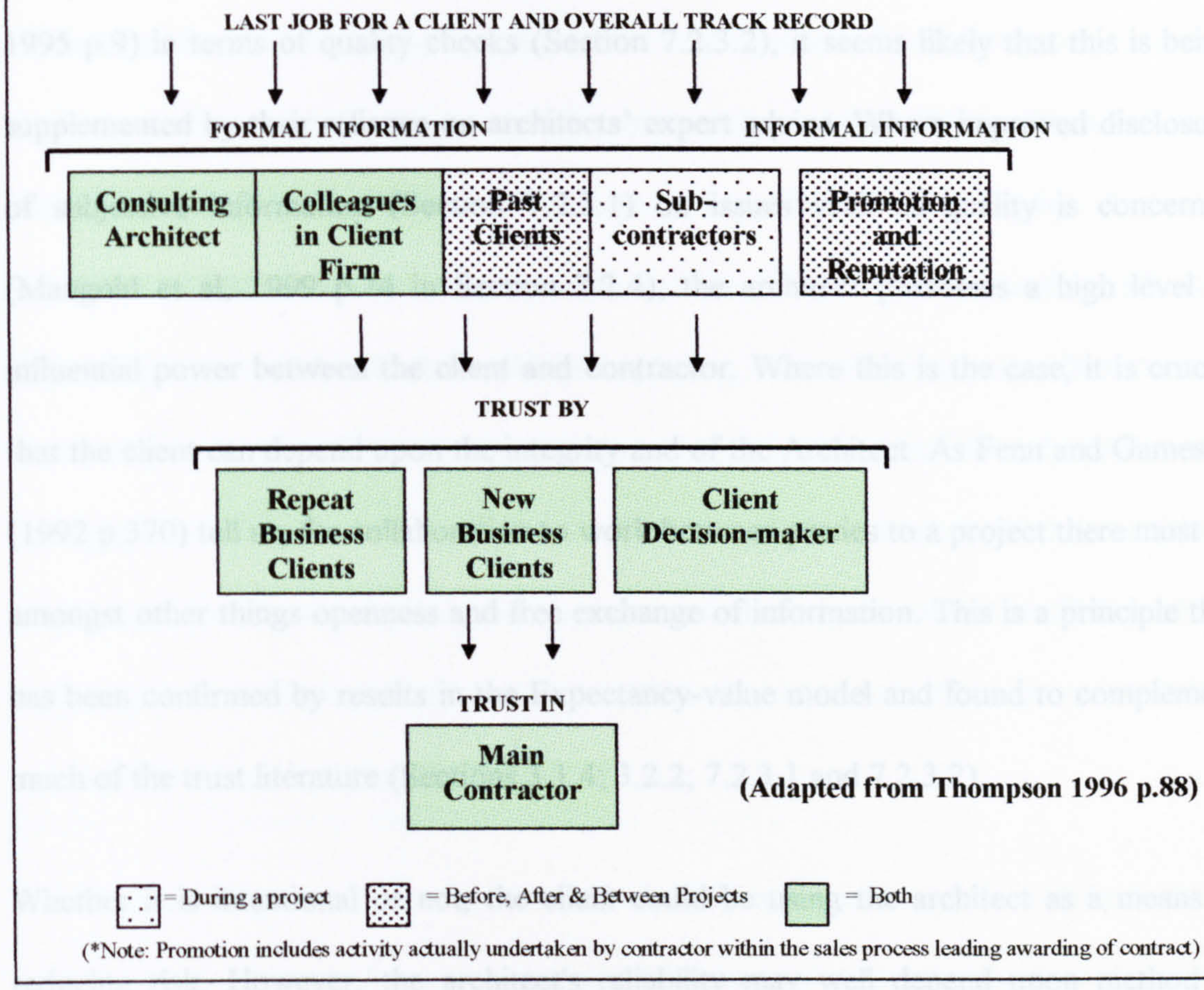
The rank order of the four remaining referents according to strength of correlation with SN is as follows (Table 6.5 - Chapter 6):

1. The Architect
2. Colleagues from within the client decision-maker's own firm
3. Contractors previous clients
4. Sub-contractors of the contractor

The results confirm the idea raised in earlier work (Thompson, 1996a p.89), that 'consultants' and 'contractors previous clients', influence the client decision-maker's level of perceived contractor trustworthiness. What is of crucial importance for both contractors and clients alike is understanding the nature of the influence these parties have and how they can be managed given the complex set of circumstances surrounding them all. To a certain extent this can be seen below (Figure 7.2 over the page).

This is a revision of the conceptual figure given earlier (Figure 3.2 - Chapter 3) showing how trust is derived from referent/influencer sources in the decision-making process. It has been altered to include 'colleagues from within the client decision-makers own firm' and 'sub-contractors to the main contractor'. It is also more specific with regards to which consultant plays the largest part in effecting trust behaviour, namely the 'Architect'.

Figure 7.2: Trust Derived From Referent Sources In The Decision-Making Process (Revised).



Promotion and reputation have remained because contractor behaviour has been shown to have some effect regarding clients' past experience (discussion under **Hypothesis 6 & 7**), and because all of these parties are capable of developing or undermining the reputation of the contractor through word-of-mouth (WOM). Each referent will now be separately discussed in relation to the literature in rank order according to strength of correlation with Subjective Norm (SN)

7.2.5.1 The Architect

The results (Table 6.5 - Chapter 6) revealed the Architect as having the strongest individual linear relationship with Subjective Norm (SN). Thus indicating that this referent has the highest level of influence over a client decision-maker's perception of contractor trustworthiness. This supports the notion that clients depend upon third party referents where issues regarding design and quality are concerned, because, where clients

are willing to exercise the trust action of 'control reduction' (Brock-Smith & Barclay 1995 p.9) in terms of quality checks (Section 7.2.3.2), it seems likely that this is being supplemented by their reliance on architects' expert advice. Where improved disclosure of subjective information (Section 7.2.3.1) on issues such as quality is concerned (Mangold et al, 1999 p.74 in Section 7.2.4), the architect possesses a high level of influential power between the client and contractor. Where this is the case, it is crucial that the client can depend upon the integrity and of the Architect. As Fenn and Gameson (1992 p.370) tell us, for collaboration to work between parties to a project there must be amongst other things openness and free exchange of information. This is a principle that has been confirmed by results in the Expectancy-value model and found to complement much of the trust literature (Sections 3.1.4; 3.2.2; 7.2.3.1 and 7.2.3.2).

Whether it is intentional or not, the client could be using the architect as a means of reducing risk. However, the architect's reliability may well depend upon method of procurement. For instance, with the Traditional Procurement route the architect is hired independently of the contractor. They will act in a consultant capacity throughout the contractor selection process, and later as an expert advisor. Being independent of the contractor may install a high level of perceived credibility in the architect for the client when they have something good or bad to say about the contractor. Even then, and this is a crucial point with regard future research, reliability of information given will be dependent upon an architect's 'previous working relationship with the contractor' (Jennings and Holt, 1998 p.659), and their interpretation of the experience they have had with the contractor. As Smyth (2000 p.243) states, where you are dealing with people, they, 'have feelings and are sometimes subjective in the way they behave'.

Clearly, the affect of these issues may be altered where the architect is either an employee of the client organisation or of the contractor where Design & Build (D&B)

procurement is being utilised. Where Design and Build Procurement in concerned, reference to the architect as a principle advisor may be received with some scepticism. In this instance the contractor has greater control over the architect. The architect will most likely be remunerated/paid by the contractor, thus affecting their loyalty. A client's perception of the architect's independence, and thus credibility, may well be affected. Depending upon which role the architect is playing, this will have some effect on how structured and controlled a contractor's communications, sales and relationship management strategies can be. Whilst the question of client trust toward the architect falls outside the focus of this research, trust and the related source credibility of the architect, may well play a crucial part within the communications process. Future research should tackle this more directly.

For the time being, results have shown that where trust is concerned the architect plays a strong role as advocate for or against a contractor. As an opinion leader, clients will listen to them, not only in a referral capacity when short listing and negotiating with the contractor, but also in dealing with a contractor throughout the project. If the client is genuinely interested in developing a trusting relationship with the contractor, the architect will need to be made aware of this, and thus their role within the process. As Loosemore (1999 p.701) highlights, one party can possess a high level of power when receiving and disseminating information to their immediate neighbours within a communications network. As gatekeepers, they can exert considerable influence over decisions that are based on information that flows through them (Section 3.2.6). For this reason, it would be necessary to select an architect that possesses the appropriate communication skills and attitude (Bourn, 2001 p.76). Hiring the wrong architect may result in problems of risk avoidance that has historically contributed to conflict. As Fenn and Gameson (1992 p.371) state, avoidance is, 'associated with withdrawal, buck

passing, side-stepping, or "see no evil, hear no evil, speak no evil" situations'. Taking the form of, 'postponing an issue until a better time, or simply withdrawing from a threatening situation'. They go to say, 'An avoiding person fails to satisfy their own concern as well as the concern of the other party' (p.371). This would be in strict contrast to the need for, disclosure of timely information and improved communication between client, architect and contractor, required if client trust is to be allowed to develop (Section 7.2.3.1). Therefore, in selecting good people with the right mental attitude, the client, contractor and architect would need to agree from the beginning that trust is important, and that it is to be one of the commonly agreed goals throughout the project (Section 3.2.2), especially where partnering is concerned.

7.2.5.2 Colleagues in the Decision-maker's Own Firm

Results (Table 6.3 – Chapter 6) revealed that 'colleagues within the client decision-makers own firm' also correlate with Subjective Norm (SN), thus indicating that multiple people within the client organisation influence the decision-maker's behavioural trust toward the contractor. This may well work in a similar way to the 'Buying Centre' within the industrial buying behaviour process (Johnston and Bonoma, 1981 p.143). Precisely how this would work goes beyond the focus of this research. Nevertheless, its implications can be discussed in relation to the literature and in turn may provide direction as to how both client and contractor organisations should consider approaching better trust relationships. Ford (1993 p. 272) states, 'a relationship must ultimately depend on the interaction of the individuals who participate. In complex interactions, several members of a buying centre interact with their opposite numbers in the supplying organisation'. If, as argued, inclusion of colleagues within the list of key referents supports the idea that something similar to the buying centre exists where trust toward the contractor is concerned, then Ford's (1993 p.272) concept of 'complex interactions' is

playing a role here. Both client and contractor organisations need to consider how they can better interact if trust is going to develop. In complex 'projects marketing', multiple relationships between employees in both the client and contractor organisations should be developed, rather than relying solely on one point of contact. This complements the work of Dahlgren and Söderlund (1999 p.13), who investigated the interaction between a client (National Electric) and contractor (Swiss-Swedish Firm ABB), involved in a large-scale industrial project for the upgrade of a power plant which highlighted the importance of 'Matching Hierarchies' in managing effective inter-firm industrial projects. Clarke and Payne (1994 p.176) talk about strengthening often fragile buyer-seller relationships through the development of a stronger team-based relationship marketing approach, highlighting Christopher's (1994) bow-tie to diamond inter-firm structure. Development of these practices between clients and contractors would work toward Ford's assertion about the existence of interaction between several parties from both buyer and seller organisations. The importance of this is reinforced by the idea (Ford, 2002 p.392) that trust between organisations is influenced by they way they interact (i.e. competitively, co-operatively or on a command basis). However, caution is needed. With buying-centres, different members have their own agendas and objectives and some of these represent opportunity for conflict to arise (Brierty et al, 1998 p.113). According to Deutsch (1960 p.123), the problem for trust arises where the possibility exists that, during co-operation each co-operator within this network of influencers is individually orientated to obtaining maximum gain for themselves, at minimum cost.

The contractor is unlikely to have any control over this referent group, and should not be paying or offering any other reward for their positive regard for the contractor. In a positive working environment the client decision-maker's colleague is likely to be viewed as loyal to the client organisation's cause. However, a lot depends upon the culture

within the client organisation. According to Bresnen and Marshall (2000 p.229), in examining Partnering in construction, they state that the problem with the relationship, ' between partnering and culture is that it can be easily forgotten that there is a real tension'. On the one hand the need for the development of trust between clients and contractors and on the other hand, surrounding economic conditions that predispose contractual partners to act (for very rational economic reasons) in more traditional, adversarial and even exploitative ways. Combined with the possibility that there may be some in the client organisation, who strongly believe that contractors are simply untrustworthy, they may be vocally active in order to create dissonance'. Similar to the 'Street Fighting Man' referred to by Smyth (2000 p.12), some people in the client organisation may continue to be exponents of the conflict culture, believing it to be a doorway to better learning, creativity, and fulfilment of organisational and individual goals (Hughes, 1994 *in* Loosemore et al, 2000b p.447). Others may do this simply to stifle creativity and avoid change. This is not an unreasonable suspicion given the history of client behaviour toward contractors in the past, in terms of being unfair, onerous or just plain adversarial (Smyth, 2000 p.243, Cox and Townsend, 1997 p.148-149). Therefore, the question of source credibility, as with the architect, also plays a part here. There may be a danger of betrayal by others in the client organisation who are, 'ambitious, selfish, deceitful people who care more for their own advancement than the mission of the organisation' (Elangovan and Shapiro, 1998 p.547). Of course the contractor is not entirely innocent here and there are things about their behaviour that need to be addressed (discussed under **Hypothesis 7**).

What is required is a closing in the distance of the trust gap that has been allowed to develop between clients and contractors. Ford et al (1998 p.30) identifies areas that contribute to distance between companies in business relationships. Where client trust in

a contractor is concerned the two most apparent contributors would be 'Social' and 'Cultural' distance. Social relating to the, 'extent to which the individuals in the two organisations are familiar with each other's ways of thinking and working. Cultural distance, 'is the degree to which the norms and values of the two companies differ because of their origins'. Where trust is concerned, a lot depends upon past experience and what dealings the decision-maker's colleagues have had with the contractor. Here, the contractor is relying on past performance and reputation. Lacking control over the client colleague word-of-mouth process, this is unstructured and therefore relies on good inter-organisational communications, sales and relationship management efforts.

For the client decision-maker to have greater confidence in the credibility and advice of colleagues within their own firm, and thus be able to develop a stronger basis of trust in the contractor, everybody in the client organisation needs to be aware of this agenda. Whilst it is not unreasonable to expect people to maintain a degree of objectivity and guardedness in their view of the contractor's trustworthiness, everyone needs understand the merits of this exercise, and how it will work in terms of consequences identified under the expectancy-value element of this research **(Hypothesis 3)**. To do this there may need to be greater 'solidarity' (Misztal, 1996 p.208), between everyones' interests within the client organisation in order to reduce the risk of damage caused by individual's hidden agendas (Elangovan and Shapiro, 1998 p.547). This would require the client organisation to work on improving an internal team culture that guards against dysfunctional aspects of group dynamics within the firm, whilst recognising and encouraging functional aspects (Fenn and Gameson, 1992 p.410). This may require the client decision-maker to play a greater role as team leader where interaction with the contractor regarding the trust relationship is concerned. This may further be accomplished inside the client organisation by, 'committed people with inter-dependence

through a common stake in the organisation purpose, which leads to relationships of trust and respect' (Kast and Rosenzweig, 1986 *in* Fenn and Gameson, 1992 p.410). In addition, there may also be a need for common education (Fenn and Gameson, 1992 p.411) that brings together an otherwise diverse set of educational backgrounds between people in the contractor's, client's and architect's respective organisations. Nevertheless, this referent group is important because it reinforces the view that multiple contacts must be developed and maintained across buyer and supplier organisations, where successful positive, on-going inter-organisational relationships, based on trust, are concerned. This is particularly relevant to the effective development of strategic partnering.

If trust and a positive on-going relationship are to work then, the, 'selling (contractors) and buying (clients) companies must be closely aligned and communicating at all levels' (McDonald et al, 1996 p.22). This would be co-ordinated by a key account manager (KAM) on the contractor side and a key contact, such as the client decision-maker (CDM), on the client side driving the process. This is important, for whilst on a day-to-day basis single projects can be run on a single point of contact through appointed inter-organisational boundary role persons, trust, and successful long term relationships like strategic partnering, cannot exist on this basis. Glaister and Buckley (1997 p.199), in examining International Joint Ventures and the selection criteria for distribution channel partners, state, 'The most important partner related selection criteria are trust between top management teams, relatedness of partners' business and reputation'. Partial integration between organisations through lower ranking personnel, without the involvement of senior managers and directors will not suffice if strategic matters are to be successfully addressed in the long-term.

Where trust is concerned, the colleague also plays a strong role, not only as a possible advocate for or against the contractor, but also as a referral source. Colleagues may have had their own experience of the contractor, or may have information that the decision-maker is unaware of. Here, the colleague can constantly inform and remind the decision-maker of what has happened in the past, and what to look out for. Again, the conditions of trust inventory plays a crucial role here. The credibility of the colleague within an organisation that has an amicable working culture may be perceived as being very high. This is something the contractor needs to know. In terms of risk reduction, the colleague presents a good opportunity for a second opinion compared to external consultants.

7.2.5.3 Contractor's Previous Clients

Bresnen and Haslam (1991 p.327) tell us, 'client experience has an important impact upon many decisions made'. Where the decision-maker is new to a client organisation, and has not had direct personal experience of the contractor before, then the contractor's previous clients combined with colleagues in the firm clearly play a major role. What is surprising is that, according to the results, respondents, having already reported past experience of a contractor still highlight the contractor's previous clients as important. It may be that consistency between different projects and project-teams is a valuable indicator of trustworthiness. With consistency there is predictability, and thus lower risk. Clients may well be combining their own experience with that of other clients. After all, Fombrun (1996 p.3) says, '...a reputation embodies the history of other peoples experiences with that service provider. Good reputation increases credibility, making us more confident that we will get what we are promised'.

Word-of-mouth referent influence can be divided into two categories. Each of these will be perceived differently by decision-makers, and have to be managed differently by contractors. On the one hand, there is open-ended word of mouth by previous clients

who simply talk to others about their experiences. On the other hand, there are *References* supplied by the contractor. The reference, whether it is solicited by the potential client, or offered by the contractor, is very much more under the control of the contractor.

(i) References: These previous clients may well have some agreement with the contractor, such as, preferential rates for on-going works, or free construction in return for allowing future clients to visit. If this is the case, then clearly the referent group is receiving reward or payment for their part and therefore, quite rightly, clients may have some scepticism towards this referent group as influencers of contractor trustworthiness. It is more likely that choice of references will be at the discretion of the contractor and therefore, more controlled. This allows the contractor to include them within a more structured communication and sales strategy. Whilst this is a commonly practised exercise, often initiated at the request of a potential client, it is more likely to work in line with contractor selection where clients are awarding a contract, rather than where a client is interested in trustworthiness. Where trust is in question, the credibility of references would be weaker than with other types of referent group. Contractors are more likely to direct clients to those, which the contractor believes to be loyal. Therefore, as a risk reducing strategy where contractor trustworthiness becomes an issue, this is a weak choice of referent for a client.

(ii) Open-ended Word-of-mouth From Previous Clients: This is where reputation really comes into its own. As mentioned in chapter two under the cyclical model of market behaviour, formal studies have revealed how word-of-mouth (WOM) is a most important source of influence where contractor reputation is concerned. It directly impacts upon a client's expectations of the contractor and the outcome of any, 'anticipated future interaction' (Heide and Miner, 1992 p.224). The contractor has little

direct control over this and therefore pro-active action has to be taken in order to contain its effects. The reason for this is highlighted by Mangold et al (1999 p.75) who states that, the focus in much of the word-of-mouth experienced is negative rather than positive communication. There is tendency for customers and clients to engage in negative word-of-mouth where they are dissatisfied with the products or services received, the way they have been treated and/or the way the service provider has dealt with problems.

Open-ended word-of-mouth is very unstructured and therefore impossible for the contractor to sensibly include within a structured communications and sales strategy. Where the word of mouth is likely to be good, it can be very beneficial to the contractor. However, care must be taken with respect to understanding what new client expectations are as a result of WOM. Failure to rectify misconceptions smoothly, or simply not delivering unreasonable expectations later, could have a devastating effect on client's perceptions of the contractor. Where negative WOM is a danger, action must be taken to contain it. This is also known as damage minimising. As Blodgett et al (1993) tells us, 'customers tendency to engage in negative WOM is largely dependent on their perception of justice as it relates to complaints'. What the contractor does where problems arise may have a dramatic effect on levels of damage to perceived trustworthiness caused by negative WOM later on.

It may well be for the reasons listed above that clients look to contractor's previous clients in order to gauge trustworthiness. However, the credibility of this referent group can be very mixed. How receptive a decision-maker is to a previous client's experience, may also depend upon the reputation of that referent party. A history of being a difficult client to work for would undermine their credibility.

7.2.5.4 Contractor's Sub-contractors

Results (Table 6.5 - Chapter 6) show that there was a satisfactory level of correlation (r = 0.31, n = 124, sig. = 0.000) between Referent 3 (sub-contractors to the main contractor) and Subjective Norm (SN). According to Latham (1994 p.81), there is some dispute regarding clear definition of a sub-contractor, Latham (p.83) refers to 'specialist' and 'trade contractors' who are sub-contracted to the main contractor. Turner (1990 p.30) defines sub-contractors as the, 'many specialist firms of craftsmen and suppliers that manufacture and install the constituent parts of a building, and work as sub-contractors to the main contractor' (examples include lift manufacturers, air conditioning companies, landscaping and specialist roofing companies). In this research a distinction was drawn between 'suppliers to the contractor' (referent 4), 'engineers involved in the project' (referent 7) and 'sub-contractors (referent 3). For the purpose of this research the term sub-contractor does not include sub-sub-contractors. Nor does it include engineers involved in any aspect of the design for the project. This referent group is perceived by client decision-makers as parties employed by the contractor, and not by the client, for the purpose of completing parts of the building contract in their capacity as trade and/or craftsmen (e.g. brick layers, carpenters, plasterers, decorators, roofing contractors).

This makes for an interesting inclusion amongst the referents. Historically relations between the main contractor and sub-contractors have been strained. According to Cox and Townsend (1997 p.148), supply chains in construction became increasingly fragmented. With this, each component became less trusting, more self interested and adversarial. Where clients became more demanding of contractors, so contractors attempted to, 'pass risk down to the next layer in the supply chain in order to minimise their own exposure'. Contractors perceive clients' expectations to be onerous and unreasonable, yet simply passed on responsibility to their sub-contractors. This led to, 'an

industry structure with many interfaces, points of tension and conflict' (p.148). Fenn and Gameson (1992 p.65), highlighting the work of Harding (1991) stating 'conflict is relatively common between the main contractor and his domestic sub-contractors, usually related to disagreement over the payment of extra items or late payment of interim instalments etc.'. Furthermore, Hellard (1995 p.54) tells us, 'At the time of approaching a sub-contractor it is likely that the project has been progressed to the stage when main decisions have been made, detailed design has progressed, and the early stakeholders will have been established'. For this reason, this referent perspective of contractor's trustworthiness during short-listing for tender and awarding of main contract is unlikely. The exception to this is where the client nominates a preferred choice for certain specialist or supplier sub-contractors to be included within the team. However, a change is occurring driven mainly by the private sector. Hellard (1995 p.58) emphasises the importance in partnering of assuring sub-contractors that they will be invited and encouraged to attend the initial partnering workshops when arranged. Cox and Townsend (1997 p.149) refer to how major clients, such as BAA and McDonalds, recognise the need for a better, more sustainable, less destructive team approach to construction. Moore (1990 p.19) highlights the importance of retaining the confidence of suppliers and sub-contractors. Firms that do so 'will benefit from the confidence generated in their suppliers and subcontractors and the improved service that will follow'. Where trust is concerned in partnering, Smit (1995 p.23) referring to Bennett and Jayes (1995) says, 'Client should also be asking their main contractor partners about their partnering relations with sub-contractors'.

It is possible that the client decision-makers are referring to sub-contractors discreetly on issues of contractor behaviour and performance during the project. Given the history between main contractors and subcontractors, if contractors are genuine in their efforts

to become trustworthy then surely this should be reflected, not only in the agreements made between the client and contractor, but also between the contractor and their sub-contractors. In this way, the client may be looking to see whether what the main contractor says and does is filtering down to the trade and craftsmen working on site.

What is important here is that clients for their part must be less onerous in their demands and more forth coming in their payments. The evidence suggests that this is happening. Findings within the expectancy-value element of the research (Table 6.3 - Chapter 6) reveal that a small, but nevertheless negative, correlation exists between clients concerns over contractors opportunistic behaviour regarding claims, and their feelings toward trusting the contractor. In addition, Greeman (2002 p.19), in reporting on the project between Bovis and Vodafone, highlights how claims are done and dusted very much quicker, rather than hanging about until the end of the project. People feel better about concentrating on solutions, rather than holding back or cutting corners for fear of not receiving fair payment, when identifying snags or addressing alterations asked for by the client. This suggests that some clients are beginning to give the contractor the benefit of trust not to behave opportunistically, and therefore avoid withholding payment until better justification of claims can be made.

7.2.5.5 Discussion of the Removed Salient Referents

Of the four salient referents that were removed, the clients own Building Surveyor had the lowest independent correlation ($r = 0.16$, $n = 124$, $p = 0.068$) with Subjective Norm (SN). Also failing required significance levels, this referent could not reliably be found to influence client decision-maker's intention (BI) toward trusting the contractor.

Results also revealed a low correlation ($r = 0.23$, $n = 124$, $p = 0.009$) between the client's own quantity surveyor and Subjective Norm (SN). Although significant, the correlative

result was a lot lower than expected. Quantity Surveyors are responsible for the measurement and valuation of amongst others, contractors' work. They then provide cost advice. They are involved with advising clients and architects of the cost of completed buildings, valuation of work in progress, variations, financial claims and the preparation of final accounts. Appointed often on the advice of the architect, they also get involved in negotiations with the contractor where cost considerations are important. History shows that many problems experienced in the UK construction industry have been financially motivated, and that quantity surveyors are renowned for there confrontational approach to negotiations and problem solving. For these reasons, it was expected that the quantity surveyor would be a key influencer where any question of a contractor's trustworthiness was concerned. However, results show that a correlation between sum of all salient referents and Subjective Norm (SN) was weaker than for just referents 1, 2, 3, 8. An explanation for this would be that clients are now, if not before, aware of how the quantity surveyor operates, and assume they will always be wary of the contractor where cost and variations issues arise. This bias does not make for a clear, objective view of the contractor, and is therefore less reliable than the other salient referents. In comparing this result with consequential beliefs discussed earlier, the findings reinforce the idea that, where clients are considering trust toward the contractor, they require open and timely disclosure of subjective information relating more to quality and performance, rather than price (Mangold et al, 1999 p.74, Sections 7.2.4 and 7.2.5.1). This is why they are relying more upon the architect than the quantity surveyor. The outcome is reinforced further by both the expectancy-value and normative findings discussed above. They show that matters regarding opportunistic behaviour by the contractor with regards claims and profits, are currently less of a concern in understanding client decision-makers Behavioural Intention towards trusting the

contractor (Section 7.2.3.4 and end of Section 7.2.5.4). Hence the quantity surveyor plays little part in building trust.

Engineers involved in the project and suppliers to the main contractor performed marginally better. Suppliers to the contractor still fell short of a satisfactory correlative result ($r = 0.28$, $n = 124$, $p = 0.002$) whilst engineers involved on the project scraped in with $r = 0.30$ ($n = 124$, $p = 0.001$). Both passed the required levels for significance. However, the low correlative result for suppliers suggests a lack of agreement between respondents as to the effect they were having on a client decision-makers' behavioural intention and therefore they were also dropped. It is possible that because suppliers are viewed as being dependent upon the contractor for business, this undermines their credibility as a referent with regards the contractor's trustworthiness, as they are highly likely to be loyal to the contractor. One exception to this would be where a supplier has been client nominated.

With engineers, the independent correlative result was very close to that of sub-contractors (Table 6.5 - Chapter 6, and Section 7.2.5.4 - Chapter 7). With such closely matched independent correlations with Subjective Norm, combined with the definitions of sub-contractor (Latham 1994 p.81, Turner 1990 p.30), it is possible that respondents considered both these referents to represent the same thing. If so, one of these referents would have to be dropped. Given that when sum of referents correlated with SN revealed a better result when engineers were removed alleviated this problem. Attempts at removing more referents weakened the correlation with SN. It was therefore decided that the remaining four discussed earlier were the best indication of key referents influencing client decision-makers' behavioural intention to trust the contractor.

7.2.5.6 Summary of Discussion Relating to the Reasoned Action Model.

This section has discussed results relating to the *Normative* element of the Modified Reasoned Action Model. This relates to **Hypotheses 4** and **5**. It augments the Expectancy-value model presented under **Hypotheses 1, 2 & 3** (Sections 7.2.1 to 7.2.3.5), helping to provide a deeper understanding of client decision-makers willingness to trust contractors and their current trust behaviour.

Results showed that inclusion of the Normative component made a dramatic contribution toward understanding Behavioural Intention (BI) (Section 7.2.4). It also revealed the dominant role over attitude played by salient referents influencing the decision-maker. More specifically, it identified who, within the 'Temporary Multi-organisation', are the key referents for the client decision-maker when considering whether to trust the contractor. This also complies with Ali's (1994 p.119) principles of 'Advocacy' and 'Reputation' (Section 3.1.2). Interpretation as to the role these referents play, and issues relating to their management, were discussed in conjunction with the literature.

Findings are mixed between the expected and unexpected. Bringing both the 'Expectancy-value' and 'Normative' findings together revealed that clients, whilst prepared to experiment with trust toward the contractor, are still not yet entirely convinced. They choose to depend heavily on third party opinion in order to gauge how contractors are performing in relation to what clients currently believe to be the reasonable and beneficial consequences of placing ones confidence in a trustworthy contractor. It is highly likely that, for the time being, trust in the contractor will be developed through inter-group dynamics, where positive and negative client perceptions of the contractor are amplified through intermediary influence. This means that trust exists within a focal (non-direct) relationship between client and contractor (Section 7.2.4). That whilst clients depend upon intermediary advice on contractors'

trustworthiness a trust-gap exists, making the contractors job of building client trust in them more difficult. The discussion also reveals that those referents identified as having the greatest influence over client decision-makers, complement findings found in the Expectancy-value Model:

The Architects role operates before, during and between projects (Figure 7.2), and relates to their expert opinions on contractors' performance in issues relating to quality (Sections 7.2.3.2 & 7.2.5.1). The architect also plays a pivotal role in the open and timely disclosure of important information between the contractor and the client (Section 7.2.3.1 & 7.2.5.1). One question raised from these findings that could be addressed, in future research is, to what extent is the credibility of the architect affected by the procurement route employed?

Client decision-makers colleagues are also likely to contribute before, during and between projects. However, their views will more likely relate to previous experiences they have had, or contractor reputation they are familiar with. What these findings also suggest is that a client decision-maker's trust toward the contractor is in part a product of opinions derived from an informal team of people in the client organisation (Section 7.2.5.2). This in turn supports the idea that, where the contractor is going to be successful in reducing the trust gap between themselves and the client, they will need to work on developing multiple relationships with an number of people in the client organisation, at all levels. This would be particularly important where Strategic Partnering is concerned (Sections 7.2.5.2). However, if this is going to work, management in the client organisation must also be proactive in developing an atmosphere and culture that is tolerant of the idea toward trusting contractors, and

working co-operatively with them to help this develop. Future research needs to address the trust relationship between clients and contractors, from the contractor perspective.

Previous clients of the contractor would mainly contribute before a project is underway demonstrating that client decision-maker's perspective of contractors trustworthiness is in part influenced by their reputation, in the same way as it works toward pre-qualification of contractors for short listing (Table 2.3 - Chapter 2). In addition, the client decision-maker places great importance in consistency of a contractor's performance where trust is concerned (Tables 6.8 & 6.9 - Chapter 6, **Null-Hypothesis $H_{0\text{-}7\text{-}3}$**). Talking to the contractor's previous clients would give the decision-maker some idea of what can be expected from the contractor's performance during the project. This supports the idea that whilst the Conditions of Trust (discussion under **Hypothesis 7**) provide a good description of contractor behaviour most likely to develop or undermine client trust, currently the decision-maker still places greater dependency on referent word of mouth than on their own experience.

Sub-contractors' influence would be strongest during the project. This group relates to trade and craftsmen working on parts of the project for the main contractor, and makes for an interesting inclusion within the list of salient referents. Given the history of relationships between main and sub-contractors, the findings suggest that where the client is experimenting with trust they are referring to sub-contractors to see whether what they are hearing from contractors' is filtering down to those working on site. Attitudinal findings suggest the client decision-maker has set aside concerns about contractors' opportunistic or unfair behaviour (Section 7.2.3.4) where claims and profits are concerned, with a view to giving the contractors' the opportunity to prove themselves.

The sub-contractors also play an important role in identifying snags during the project, and would therefore contribute towards the open and timely disclosure of information needed to deal with problems as they arise (Section 7.2.3.1). In short, if the sub-contractors are more confident in their dealings with the main contractor, then maybe the client can be as well.

Finally, of those salient referents that were removed the most unexpected was the Quantity Surveyor. When this is compared with findings under the Expectancy-value model (Sections 7.2.3.1 & 7.2.3.4) combined with the clients' level of dependency in the Architect (Section 7.2.5.1), exclusion of the Quantity Surveyor seems appropriate. It reinforces the idea that, where clients are trying to trust the contractor, they are less concerned about the possibility of opportunistic behaviour. What is more important is the timely disclosure of information where problems arise. Where this is possible, less monitoring of the contractor's performance is required, problems can be dealt with more efficiently rather than different parties to the project covering up or arguing amongst themselves as to who is at fault, and then wasting time and money over disputed claims. The client sees trusting the contractor as beneficial where it helps to facilitate parties involved working closer together as a team. This said, the contractor would be expected to perform better in a number of areas where historically they have failed. The next section **(Hypothesis 6)** examines aspects of contractor behaviour that play an important part in developing or undermining client decision-makers' trust in contractors.

7.2.6 Past Experience and Behavioural Intention – Null-Hypothesis 6 REJECTED

This section relates Ali's (1994 p.119) requirement for understanding, 'Client's own past experience' (Section 3.1.2). Inclusion of a measure for Past Experience (PE) with the Expectancy-value and Normative components creates the final Modified Reasoned

Action Model. This covers all aspects by Ali (1994 p.119) affecting client confidence in a professional service provider such as a building contractor (Section 3.1.2).

Eagly and Chaiken (1993 p. 195) state, 'Attitudes based on direct experience have greater clarity and are held with more confidence and certainty than attitudes based on indirect experience'. They also assert that there is a robust argument in support of the idea, 'for attitude-behaviour correlations to be larger for attitudes based on behavioural experience with the attitude object, rather than attitudes not based on such experience' (p.195). This being the case, it would be expected that where the client decision-maker had previous experience of the contractor under conditions allowing trust to prosper, then the measure of Past Experience (PE) in relation to Behavioural Intention (BI) to trust the same contractor in future would be strong. In addition, the client decision-maker's higher level of confidence would be reflected in the stronger certainty of their attitudes and perceived consequences of such trust behaviour, compared to a decision-maker who lacked the direct experience.

Findings so far (Figure 6.6 - Chapter 6), confirm this assertion, given the moderately strong correlation of $r = 0.57$ ($n = 124$, $p <= 0.000$) between Past Experience (PE) and Behavioural Intention (BI). However, the Beta weights ($\beta = 0.17$) indicate, that the affect of Past Experience on Behavioural Intention in relation to *Normative* ($\beta = 0.42$) and *Attitudinal* ($\beta = 0.33$) elements within the model comes third. In addition, regression results showed only a small improvement (+0.01) in the overall R square value when compared with the ordinary Reasoned Action Model (Figure 6.5 - Chapter 6), raising it to a highly significant $R^2 = 0.58$ ($p<=0.0000$) (Figure 6.6 - Chapter 6). Whilst this improvement is small, once again, in accordance with Rose and Sullivan (1993 p.177), this can be considered an excellent result. Therefore, **Alternate Null-Hypothesis $6H_{0\text{-}6alt}$** is clearly rejected.

However, when results are compared with the *Normative* element of the model (**Hypothesis 4**, Section 7.2.4), they are in stark contrast to Currall and Judge (1995 p.166). They found a weak association between normative influence on behavioural intention to trust, whilst finding that respondents were particularly sensitive to a person's past behaviour. This shows a reverse in priority between the 'Normative' and 'Past Experience' elements influencing Behavioural Intention (BI) to trust in future. Currall and Judge (1995 p.167) go on to conclude, 'results showed that strong relationships between BRPs were associated with high trust levels. Specifically, the finding that longevity of prior work relationships was associated with increased trust, was consistent with the idea that trust is a relationship specific asset that accrues over time'.

Results in this study show that, whilst client decision-makers regard past experience as important where they intend to trust the contractor, its influence on Behavioural Intention (BI) is less than the *Normative* influence. Das and Bing-Sheng (1998 p.502), in reviewing work of Bowman and Hurry (1993), state, where trustful relations develop it is more likely that a gradual approach is adopted, in which partners start with limited investments. "Incremental resource commitments may be the preferred strategy when risk and uncertainty level are high". Das and Bing-sheng (1998 p502) go on to state, 'Deeply rooted in historical engagement, trust is most likely to be the accumulation of prior satisfactory experiences' (Gulati 1995; Luhmann 1988). 'A firm with a reputation of being honest, fair and trustworthy gives one the needed first piece of evidence to take some initial risk' (Barney and Hansen 1994). Locating a partner with a good reputation seems to be an effective starting point. The findings currently demonstrate CDM's lack the confidence to depend upon their own experience over and above the stronger influence received from referent advice represented by the 'Normative' element in the model. Hence the small but highly significant contribution 'Past Experience' has made to

the R square value. Whilst CDM's recognise the important role that 'Past Experience' (PE) would play in being able to trust the contractor, they lack the necessary experience of trusting the contractor independently of advice from other parties in the project team.

Earlier, findings demonstrated (Section 7.2.3.1) client decision-makers awareness in the importance of trust. Combined with the dominance of the *Normative* influence over that of client's own attitudes (Figure 6.6 and Section 7.2.3.4) and past experience (PE), these findings are found to be the reverse of those found by Currall and Judge (1995 p.167). This supports the idea that, for clients, trust toward the contractor is still a new idea, and with insufficient research in the area of trust between client and contractors (Bresnen and Marshall 2000 p.820-821 - Section 7.2.1), clients may be undecided as to what to look for in a trustworthy contractor. Whilst experience is recognised as being important, client decision-makers still remain undecided as to precisely what criteria gives them the confidence for deciding for themselves a contractor's trustworthiness. Lacking the certainty, that past experience provides in other circumstances (Eagly and Chaiken (1993 p. 195), the client remains dependent upon referent advice or reputation.

With communication becoming more efficient as the client decision-maker gains more experience of a trustworthy contractor, the client can expect to develop a better understanding of how trust between themselves and the contractor will work. This idea complements the work of Eagly and Chaiken (1993 p.197), who state, 'attitudes that are repeatedly expressed or based on direct experience have a greater influence on judgement and behaviour because such attitudes are presumed to have the underlying property of increased strength. Stronger attitudes are more accessible (come to mind more clearly), and this accessibility increases the likelihood that they will be activated spontaneously in the presence of cues relating to the attitude object' (in this case willingness to trust the contractor). It is still early days regarding client decision-makers'

ability to trust the contractor. However, if repeated experience continues to live up to expectations then, over time, it is expected that decision-makers' own attitudes will develop and will become dominant over the need to rely on referents. This would represent a closing of the trust gap (Section 7.2.5.6).

However, one note of caution. Ajzen and Fishbein (1980 p.50) tell us, whilst, 'it can be seen that direct experience may help preserve a stable intention and hence a strong intention-behaviour relation', '...direct experience need not lead to the development of more realistic expectations'. Ganesan (1994 p.10), in examining supplier-retailer relationships, found, 'a retailer's experience with the vendor did not have a significant effect on vendor credibility'. They go on to say, 'This suggests that creating trust could be related to actual behaviours within a specific relationship rather than length of the relationship'. This point is supported by Swan et al (1999 p.102), who find, the need for understanding both the 'Consequences' and 'Determinants' of trust in a given situation if it is to be managed successfully. They go on to highlight (p.102) how production of trust is linked to behaviours on the part of the trustee (contractor). Das and Bing-Sheng (1998 p.493), define, 'Confidence in partner co-operation as a firm's perceived certainty about satisfactory partner co-operation', 'the concept is about a firm's expectations about the partner's behaviour'.

Findings so far (Section 7.2.3 & 7.2.3.1) have revealed what client decision-makers currently believe are the consequences of trusting a contractor with whom they have recently worked. This does not reveal the determinants of trust. To do this requires an understanding of the contractor's behaviour previously experienced by the client decision-maker. If, as stated earlier with the 'Cyclical Model of Marketing Behaviour' (Figure 2.2 - Chapter 2), increasing levels of past experience contribute toward the development of clients' expectations of contractors' future performance, it is essential

contractors' manage client expectations in order to avoid possible disappointment and therefore dissonance with the trust relationship somewhere later on down the line.

Sheppard and Sherman (1998 p.427) tell us, 'trust is partially a products of one's capacity to assess the trustworthiness of one's potential partner'. They go on to say, 'trustworthiness means different things, depending upon the nature of the risk being assumed in the relationship'. It is on this point, that results relating the Butler's Conditions of Trust Inventory (CTI) when correlated with the measure of Past Trust Experience (PE), inform us of which critical aspects of contractor behaviour are important. The conditions of trust must be managed carefully if a client's on-going experience of the contractor is to continue to be a positive one, leading to the 'stable and increasingly stronger intention-behaviour relationship' referred to by Ajzen and Fishbein (1980 p.50) above. In short, the sustainable and increasingly confident intention to trust the contractor in future. Discussion of findings will now move on to these crucial Conditions of Trust identified in relation to **Hypothesis 7**.

7.2.7 Conditions of Trust and Past Experience – Null-Hypothesis 7 REJECTED

The discussion so far has led to the idea that client decision-makers view the ability to develop trust in contractors as being very important. However, due to the recency of the subject in construction management and marketing, there is little to help clients to determine what trust is and what is required to develop it. Client decision-makers are therefore cautious. Choosing to depend upon referent influence over their own attitudes and experience, a gap has been revealed in the trust relationship between clients and contractors (Sections 7.2.3.4 and 7.2.5.6). However, Ford et al (1998 p.27) tells us, 'Relationships will vary depending on the extent to which the two companies feel that they *need* to learn, on their *willingness* to learn, and on their *ability* to learn'. Whilst, Hall (1996) is noted as saying (Section 3.1 - Chapter 3), 'The whole industry has been

tarnished by confrontation and as we learn about words like integrity and responsibility so we learn to deal with words like trust'. It would seem that client decision-makers, whilst being cautious, wish to learn about trust and hence are experimenting with it in the client-contractor relationships they are currently working with. However, the task is difficult given, as Bresnen and Marshall (2000 p.820-21) highlight, there is, insufficient research into social science concepts such as trust between clients and contractors (see Section 3.1 - Chapter 3). This problem appears similar to one identified by Ford et al (1998 p.217). In examining the 'Loose Group' Chain of Fashion Stores relationship with their different types of suppliers, it was noted, 'the company (client) has no coherent approach to learning from previous problems or for improving its suppliers (contractor's) skills, its own performance or the quality of its own relationship'. Currently construction management and marketing theory and practice are devoid of any appropriate tools to help them to address what contractors can do to close the client-contractor gap in trust.

The Conditions of Trust Inventory (CTI), derived from outside the construction discipline, has been utilised in order to overcome this problem. The findings from the application of this tool in the context of the client-contractor relationship have been found to be good. A very strong and highly significant correlative result of $r = 0.89$ ($n = 124$, $p <= 0.000$) is revealed. This means the overall sum of all 'Conditions of Trust' (CTI) used provides a good indication of which aspects of contractors' behaviour influenced the clients perception of their trustworthiness during the last project they did for them. This provides both clients and contractors with a reliable and coherent set of criteria for determining a contractor's trustworthiness on future projects. It is through these criteria that contractors can work towards the confidence end of the risk-confidence continuum (Figure 3.1, Section 3.1.5 - Chapter 3) and through a series of projects, close the trust-gap that currently exists.

Discussion will now examine each Condition of Trust under separate Null Hypotheses. Each condition falls into one of two dimensions relating to contractor behaviour. Either the *'Ability'* dimension, defined by Fletcher and Peters (1997 p.527 - in accordance with Andaleeb, 1992) as, 'the customer's perception of the firm's ability to produce desired outcomes'. The other is the *'Intent'* dimension, 'the customer's perception regarding the firm's motive or intent' (p.528). This also complies with Frazier's (1983 p.74) 'Input' and 'Output' constructs in inter-organisational exchange behaviour.

7.2.7.1 Availability and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}1}$ REJECTED

In the survey this variable addressed the ability of the client to contact the contracts manager as and when needed. Whilst the contracts manager was used as the key party for respondents to reflect upon, the principle being examined was the level of availability of somebody qualified and senior enough to deal with client enquiries, questions or concerns as they arose during a recent project. Hannah (1991 p.6), defined it as, 'being physically present when needed'.

A moderately strong and highly significant correlative result of r = 0.51 (n=124, p<=0.000, Table 6.8 - Chapter 6) showed this variable to be a key descriptor of a contractors' behaviour, affecting clients' perceived trust. The finding supports Butler's (1991 p.657) inclusion of 'Availability' within the Conditions of Trust Inventory, and complements Hannah's (1991 p.43) application of CTI in the US construction industry. Although, Fletcher and Peters (1997 p.529) had not utilised this variable in their application of CTI, in accordance with their use of Alpha coefficient tests, results from this research placed the 'Availability' variable within the contractor's ability/output behavioural dimension (Table 6.9 - Chapter 6). In accordance with Frazier's (1983 p74) discussion of 'Outcomes', this means that the client decision-maker's perceived level of

satisfaction or dissatisfaction with the contractor's actual performance regarding this variable directly affects the decision-maker's perception of the contractor's trustworthiness. If the contractor's performance falls short of what the client decision-maker feels that they deserve and expect, the client would become dissatisfied, and this would contribute towards undermining their future trust in the contractor.

Wong et al's (2000 p.797) work with trust within three Singapore public sector construction project management agencies recognised Butler's (1991 p.657) condition of 'Availability' from an HRM perspective referring to it under their 'Demonstrating Concern' (p.800) construct. Described as (p.803) 'Familiarity and Dialogue' it required management to work in open door offices located near to employees, facilitating contact across levels with frequent team, organisational and divisional meetings, whilst ensuring regular sessions between senior management and employees. 'Availability' is therefore important to the forming trust and shown to exist in different relationships in the construction industry. Inclusion of 'Availability' in aiding understanding of client decision-makers perception of contractors trustworthiness distinguishes these findings from previous research on trust in other sectors, where no mention of this variable is made in the findings (Swan et al, 1999; Michell et al, 1998; Kumar, 1996; Mayer et al, 1995). However, this aspect arguably ties in Anderson and Weitz (1989 p.314) concept of 'Support'. They state, 'lack of support is a common complaint among channel members, leading to resentment and poor relationships'. One example they give of providing support is, 'response to requests for information'. This compares well with the definition of 'Availability' utilised here, and relates to 'Openness' (Section 7.2.7.8 later).

These findings also strongly reflect findings in the consequential beliefs identified under the Expectancy-value Model (Section 7.2.3.3), the 'Openness' condition of trust, and the client decision-maker's need for timely and accurate disclosure of information during the

project (Section 7.2.3.1) which means that failure of somebody in-the-know to be available at short notice would stall the process.

In support of this finding, qualitative research (See Table 5.2.1 – Chapter 5) revealed the feeling by clients that someone should always be there when the client telephones, and that current technology aiding communications leaves little excuse for not being able to make contact. Even if somebody does not have the answers immediately to hand, they should be able to take ownership of the issue quickly and set wheels in motion to address it. This point supports Swan et al's (1985 p.208) discussion on the relationships between 'Availability' and 'Competence' in which they state, 'the customer will not expect you to know everything; get the answer and get back to the customer'.

This finding on 'Availability' in trust also supports Handy (1995 p.46) who, in discussing trust in virtual organisations (similar to the Temporary Multi-organisation), talks of, 'trust needing touch', or need for personal contact. 'Paradoxically, the more virtual an organisation becomes, the more its people need to meet'. This point also ties in with the Ford's (1993 p.272) assertion about the need for improved inter-firm interaction between several parties from both buyer and sellers organisations (Section 7.2.5.2). Furthermore, the contractor's failure to have someone responsible available when needed may lead client decision-makers to perceive the contractor as having a 'poor attitude' toward their needs. 'Poor Attitude' having been identified in Smeltzer's (1997 p.43) research as being an attribute of trust eroding behaviour.

Swan et al (1985 p.208), in looking at how sales people gain customer trust, placed 'Availability' in the context of 'Customer Orientation'. They illustrate this point with the statement, 'Call me anytime for anything that you need', and supports this idea with mention of 'a 24 hour hotline or other capacities to serve the customer'.

Cobb (2001 p. 41) highlights how developments in the e-markeplace could 'help transform the way buildings are designed, procured, built and *managed*' quoting Peter Rogers as saying, 'The internet now gives us the opportunity to address many of the industry's problems by sharing best practice, encouraging standardisation, *increasing transparency of information* and improving procurement, *collaboration* and logistics'.

The issue of 'Availability' by key personnel in the contractor's company ties in with a number of other conditions of trust such as, 'Consistency' (Section 7.2.7.3) 'Loyalty' (Section 7.2.7.7) and 'Receptivity' (Section 7.2.7.10). The extent to which the contractor moves key personnel on to other projects can act to undermine consistency in the people the client decision-maker is dealing with. It raises questions about levels of attention given to the client project. Alternatively, the degree to which the contractor listens to the client and is receptive to their problems may affect the way they react (Smeltzer 1997 p.42). It also relates to 'Competence' (Section 7.2.7.2) and 'Openness' (Section 7.2.7.8), insofar as it raises important points about the contractor's ability and willingness to respond to client problems or questions and provide information when needed.

7.2.7.2 Competence and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}2}$ REJECTED

Correlative results (Appendix C.15) show that all 'Competence items' were found to negatively correlated with response to the statement, 'once on site you discovered the contractor lacked the competence to carry out the project as well as you would have liked'. This variable addresses the management ability and skills of the main contractor organisation to tackle a client's particular project at all levels, from direct management of people involved on the project, to site management and the management of subcontractors on site. Defined by Hannah (1991 p.6) as, 'competent in the specialised skills required to do a particular job'.

A strong and highly significant correlative result of r = 0.73 (n=124, p<=0.000, Table 6.8 - Chapter 6) between 'Competence' and 'Past Trust Experience' showed this variable to be a key descriptor of a contractors' behaviour in relation to clients' level of trust towards them. This supports Anderson and Weitz's (1989 p.320) research, which revealed an indirect but positive link between 'Perceived Competence' and 'Trust', through the facilitating variable of Communication. As with 'Availability' this ties in directly with the 'Expectancy-value findings (Sections 7.2.3.3 & 7.2.3.1). They state (p.321), 'Competent personnel means better communication, which in turn increases trust'. This also relates directly to the 'Normative' findings (Section 7.2.5 and 7.2.5.4) which show how important the referent influence of 'Sub-contractors to the Main-contractor' are in influencing client decision-makers' perception of contractor trustworthiness. This is because the competence of the main contractor in managing the sub-contractors directly affects the quality of service experienced by the client.

In addition, this finding complements other CTI research, which has also identified 'Competence' as a key Condition of Trust (Fletcher and Peters, 1997 p.529; Butler, 1991 p.648). Most notably it complements Hannah's (1991 p.43) application of CTI in the US construction industry, which highlights the importance of skills and capability within the construct of 'Competence'. Other research by Wong et al (2000 p.797), in examining the role and nature of trust in three Singapore public sector, construction project management agencies, reflect on the term 'performance' in association with trust. They state, 'Just as management needs to have confidence that employees will deliver on their commitments, so the employees themselves need to have the confidence in their own collective abilities to produce the goods'. Therefore, these findings on the importance of 'Competence' in relation to trust in the UK construction industry compare strongly with findings in other parts of the world.

Alpha coefficient results show this variable to fit within the contractors' ability/output behavioural dimension (Table 6.9 - Chapter 6). Therefore it also relates to Frazier's (1983 p74) principle of 'Outcomes'. More notably, it reinforces both Fletcher and Peter's (1997 p.529) positioning of this variable within a trustee's ability/output behavioural dimension, and Mayer et al's (1995 p.717) findings which also placed 'Competence' within their 'Ability Antecedent' for Trustworthiness'.

The importance of this finding is reinforced with the point made by Lawrance, Director of Projects and Business Improvement at Defence Estates (*in* Hailstone 2002 p.8). He is quoted as saying, 'We need to have improved project management skills and we need to remove the adversarial barriers that have always existed. This will need new skills sets because to produce a high performing team you've got to develop trust and the softer skills that surround that'. However, if the problems identified by Woodward and Woodward (2001 p.356) still exists (Section 3.2 and 3.2.1 - Chapter 3), this requires senior management of contracting companies to work hard at developing these skills if trust building efforts are going to succeed.

Qualitative research findings (Thompson 1997 p.68) revealed that before awarding a contract the client needs to know that the contractor has a full knowledge of a project in order to trust them to do it. In addition, before and during the project the client wants the confidence in knowing that the contractor knows enough about their needs in the project beyond simply wanting a building (Thompson 1997 p.68).

This could be closely related to pre-qualification criteria (Table 2.3 - Chapter 2) such as, 'Recent similar projects' (Fellows and Langford, 1993 p.8) or 'Track record in similar projects' (Bartram, 1996 p.25) and 'Qualifications of key persons' (Jennings and Holt, 1998 p.657). These criteria focus on skills and management capabilities key personnel

are either trained or experienced in, which would equip them in understanding and handle technical issues, customer management demands and any problems likely to occur during the project.

If during pre-qualification and later post-tender negotiations the contractor has led the client decision-maker into the belief that they were experienced enough to take on the project, failure to demonstrate expected levels of competence once the project is up and running would undermine future trust. This point also highlights the link 'Competence' has with 'Consistency' (Section 7.2.7.3) and 'Receptivity' (7.2.7.10) discussed later.

The findings also complement work done in other sectors. Handy (1995 p.46), in discussing trust in virtual organisations (similar to *Temporary Multi-organisations),* states, 'unlimited trust is, in practice, unrealistic. By trust, organisations really mean confidence (Section 3.1.5), a confidence in someone's *competence* and in his or her commitment to a goal'. Swan et al (1985 p.208) highlight how issues such as 'Availability' (Section 7.2.7.1), ability to get the job done, whilst discovering and satisfying customer needs all act to demonstrate 'Competence'. Doney and Cannon (1997 p.48) talk of delivery performance in terms of product availability. This principle translates into part of contractors performance in terms of the 'Availability' discussed above (Section 7.2.7.1), also being a key indicator of 'Competence'.

Once again, as with 'Availability', these findings tie in with 'Expectancy-value' findings (Section 7.2.3.3), as clients' previous experience of contractor competence may influence clients' feelings about 'Monitoring of contractors' performance during future projects' and the 'Likelihood of a successful project'. Furthermore, failure to live up to expectations would undermine credibility in a contractor's word, raising concerns about their reliability to disclose timely and accurate information. Therefore, the question of contractor 'Competence', also ties in with 'Availability' (Section 7.2.7.1) 'Consistency'

(Section 7.2.7.3), 'Integrity' (Section 7.2.7.6) and 'Promise-fulfilment' (Section 7.2.7.9). This, in so far as it reflects a contractor's reliability to be around when needed, that their performance is consistent between projects, how honest they are from the beginning, and whether their performance matches promises. All this affects clients' future trust behaviour, toward contractors.

7.2.7.3 Consistency and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}3}$ REJECTED

This variable set out to understand how differences between, clients' expectations and contractors' performance, attitudes between different contractor teams or changes in the quality of work throughout the project, impact on the client decision-maker's perception of a contractor's trustworthiness. All 'Consistency' based trust items utilised in the survey, negatively correlated with the statement, 'You or your representative found there to be discrepancies between the standard of work you expected and that delivered'. Hannah (1991 p.6) defined this variable as, 'Acting and making decisions in such a way as to prevent other's anxiety caused by the unexpected. Predictability'.

With a very strong and highly significant correlative result of $r = 0.83$ ($n = 124$, $p <= 0.000$) between 'Consistency' and 'Overall Trust Experience', this variable can be described jointly (with 'Integrity') as the most important descriptor of a contractor's behaviour to affect client's perception of contractor trustworthiness. Once again, these findings support Butler's inclusion of the 'Consistency' category within the original Conditions of Trust Inventory. Also, as with 'Availability' and 'Competence', the findings complement Hannah's (1991 p.43) findings for 'Consistency' within Owner's (Client's) view of the Constructor (Contractor) in the US construction industry.

Alpha coefficient results show this variable to fit within the contractor's ability/output behavioural dimension (Table 6.9 - Chapter 6). This variable, whilst not utilised by

Fletcher and Peters (1997 p.529) in their application of CTI, still complies with Frazier's (1983 p74) discussion of 'Outcomes'.

The work of Wong et al (2000 p.803) identified 'Consistency' in the context of follow through on commitments and promises (discussed later Section 7.2.7.9). Findings in this research regard 'Consistency' as being those aspects of contractor behaviour that satisfy the clients' expectations derived from contractors' past performance, and this ties in with Wong et al's (p.803) findings on 'Previous Experience'. This supports the notion that expectations can reflect predicted or anticipated future interaction based on past experience or reputation (Jennings and Holt, 1998 p.657; Fellows and Langford, 1993 p.8; Heide and Miner, 1992 p.283; Baker and Orsaah, 1985 p.31). Where the client has had a good past experience of a contractor, this goes some way to reducing uncertainty and raising confidence. If the contractor then proves reliable in accordance with expectations derived from promises, commitments, past experience or reputation then this reinforces that confidence, thus moving the client further towards a stronger, confidence based trust (Figure 3.1 Section 3.1.5). When a client selects a contractor with whom they have no previous experience, they are entirely dependent upon the referent influence of colleagues, past clients and/or the architect (Section 7.2.5). This supports the idea that contractors' behaviour regarding these conditions of trust act as a past experience influence on Behavioural Intention (BI) to trust the contractor in future. It also supports the notion that the 'Normative' element of the Modified Reasoned Action Model dominant because client decision-makers' still have relatively little experience of thinking about contractors in terms of trustworthiness, rather than simply managing project related risk (Section 3.1.5). These findings also go someway to explaining why research has shown clients' prior relationship with a contractor as being important where pre-qualification for tender is concerned (Baker and Orsaah, 1985 p.31; Jennings and

Holt, 1998 p.657 - Table 2.3 - Chapter 2). They also complement the trust research outside the construction literature. Morgan and Hunt's (1984 p.33) findings show that uncertainty negatively correlates with trust in successful relationship marketing strategies. Doney and Cannon (1997 p.46) found that, 'trust of the supplier firm and trust of the salesperson are related to anticipated future interaction'. Mayer et al (1995 p.720) discuss a link between 'Consistency' and 'Integrity' (Integrity being one of their three factors of trustworthiness). They state, 'Although a lack of consistency would cause one to question what values a trustee holds, being consistent is insufficient to integrity (and therefore trustworthiness), as the trustee may consistently act in a self-serving manner'. This reinforces the idea in this research, that how the contractor behaves with regards 'Consistency' does affect their ability to develop or undermine trust by the client. It also underlines the importance of understanding 'Consistency' and 'Integrity' as two separate conditions of trust (as this research does - Section 7.2.7.6), as well as understanding how they are linked. Smeltzer's (1997 p.43) findings reveal that inconsistencies in suppliers' behaviour raises questions about their commitment to a contract, which then erodes trust. Whilst Anderson and Weitz (1989 p.322) highlight, where, 'communication (Section 7.2.3.1) builds trust', this is, 'a critical determinant of relationship continuity'. The findings also support Michell et al (1998 p.168) who tested the relevance of 'Dependability' and 'Quality Consistency' as foundations of trust, and found 'Dependability' (ongoing consistency in service levels) to be reliable. Findings when compared to the literature therefore highlight how inconsistent contractor behaviour is not compatible with trust, but consistent behaviour is.

These quantitative findings support qualitative research (Table 5.2.1 – Chapter 5). This highlights how 'Past Performance' places certain expectations on future performance, and that discrepancy in standards between jobs by the same contractor would be a problem.

'It is felt that consistency between projects is largely down to individuals. Different teams result in a different product. This highlights the distinction between trusting a company and trusting the individuals within that company' (Thompson 1997 p.68).

These findings also highlight the importance of good client management from the pre-contract stage, throughout the life of the project and beyond. 'It is vitally important, where you have a long-term relationship (e.g. strategic partnering or supply framework agreements), having the same team throughout helps. Continuous-teams in long-term relationships are a good thing'. This point also validates Woodward and Woodward's (2001) assertion that, non-permanent or temporary relationships are a major reason why parties lack willingness to develop trust in the construction industry (Section 3.2.1).

The findings also complement Smeltzer (1997 p.42-43) who highlights how poor attitude erodes customer trust. Difficulties regarding attitude may be most evident between the negotiating team the Contract Manager and site team, where a project is handed over. It is important 'attitude' in the contractor's employees remains consistent. Smyth (2000 p.294-295) tells us, 'Establishing trust might as well start with the sales people. They are the very people who are often least trusted by the client - the slick, fast-talking sales person'. He goes to say that, 'If the sales person can build trust during the courting process' this is a prelude to the client trust being transferred to the contractor organisation generally. However, if the attitude of the site team is different to that of the negotiation and sales team with regards to what has been understood and agreed in terms of client needs, consistency is broken and this could seriously undermine client trust in future. This point emphasises the greater need for improved internal communication within the contractor organisation, with a common client orientated culture supported by on-going reciprocal monitoring, whereby different parties within the contractor organisation 'keep an eye on each other' (Woodward and Woodward 2001 p.368).

However, they go on to highlight Fukuyama (1995) stating the need for shared values and a shared community of trust, with each actor supporting one another (p.367). Without this, employees such as the contractors own Project Manager, would attempt to disguise any performance shortcomings on his part (p.356). Covering up problems rather than openly addressing them for fear of the consequences is inherent within blame orientated, 'authoritarian and adversarial company cultures' (Woodward and Woodward 2001 p.371). This immediately undermines the contractor organisations' ability to provide consistent service quality to the client (p.356). As Smyth (2000 p. 247) states, 'contractors consistently fall short at the expectation stage. They help build up client expectations during selling, then let the client down during the contract'. He goes on (p.247), referring to a 'Baton in a relay race' and the importance of effective hand-over between different parties or teams within the contractor organisation. Bresnen and Marshall (2000 p.822) highlight the 'considerable emphasis that is being placed upon developing a team culture and fostering the right attitudes'. Support for this must start with senior management if a more collaborative approach is to be seen as both credible and legitimate, not only for employees in the contractor organisation but by subcontractors, suppliers and clients alike. Without this, implementation of the improvements outlined within the 'Normative' findings of this research (Sections 7.2.5.2 and 7.2.5.4) will be faced with considerable difficulties.

This discussion reveals that contractor 'Consistency' also ties in with 'Competence' (Section 7.2.7.2), 'Openness' (7.2.7.8), and 'Promise-fulfilment' (7.2.7.9). Insofar as trust is affected by consistency between what the contractors say they can do and the extent to which their employees are willing to work more closely as a team, directly affecting what they are willing or capable of delivering at the end of the day.

7.2.7.4 Discretion and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}4}$ REJECTED

This variable addressed contractor discretion on two points. First, was director and site-teams' behaviour with regards possession and disclosure of any confidential or sensitive information about the clients' project. Second, was the professional manner in which the site team conducted themselves whilst working on the project. Defined by Hannah (1991 p.6) using the expression 'Discreteness', as 'keeping confidences'. Qualitative depth interviews in this research, whilst supporting this definition, also raised a point about the site team using their professional discretion in executing their own snagging, deciding what needed altering and when something needed to be brought to the client or client agent's attention.

A strong and highly significant correlative result of r = 0.67 (n = 124, p <= 0.000) between contractors' 'Discretion' and 'Past Trust Experience' also revealed this category to be a key descriptor of contractor behaviour having an effect on clients' level of trust experience toward them. The finding supports the work of Butler (1991 p.648) and Fletcher and Peter's (1997 p.529) in revealing this behavioural condition to have an effect on trust. As with, 'Availability', 'Competence' and 'Consistency', it also complements Hannah's (1991 p.43) inclusion of 'Discreteness', in trust from the owner's (client's) perspective toward the constructor (contractor) in the US construction industry.

With 'Discretion', a distinction can be drawn between trust as experienced internally within the management of contractor companies, and trust by clients toward contractors. Both Wong et al (2000 p.801) and Woodward and Woodward (2001 p.369) examined management-employee trust within the contractor organisation and neither identified 'Discretion' as being important. Likewise, many researchers of trust outside the construction discipline have also failed to recognise 'Discretion' (Mitchell et al, 1998;

Bhattacharya et al, 1998; Lewicki et al, 1998; Doney and Cannon, 1997; Kumar, 1996; Handy, 1995; Anderson and Weitz, 1989; Swan et al, 1985; Morgan and Hunt, 1984).

On the other hand Mayer et al (1995 p.718) recognised Butler's (1991 p.648) inclusion of 'Discreteness' in the Original Conditions of Trust Inventory (CTI), but failed to assimilate this into their three factors of trustworthiness (p.717-720). The findings do however complement some peoples' work. Smeltzer (1997 p.43) asserts that, leaking or sharing of confidential information and the resulting breach of privacy is a definite trust eroding behaviour. Whilst Brock-Smith and Barclay (1995 p.22) highlight the importance of 'Forbearance from Opportunism' made up from, amongst other things, the avoidance of both, behaviour likely to compromise a relationship, and actions likely to be seen as detrimental to the partner.

Alpha coefficient results place this variable within the contractor's Intent/input behavioural dimension (Table 6.9 - Chapter 6). Therefore it relates to Frazier's (1983 p74) principle of 'Inputs' and confirms Fletcher and Peter's (1997 p.529) allocation of this variable into their Motive/intent dimension of trust. This condition therefore relates to those aspects of a contractor's behaviour that indicate their motives. Motives, having been repeatedly identified as important to trust (Mayer et al, 1995 p.719). The way contractors' behave in relation to this variable indicates their level of investment in, or willingness to develop, clients' trust towards them. Frazier (1983 p.74) describes 'Inputs' in terms of comparing levels of reward against input. In this case, where the ratio between the two appears to be balanced there is equity in the contractors' actions. This may well act towards building trust. If they appear to receive or demand undue levels of reward for their effort the client may perceive this as inequitable, undermining trust.

Finally, these quantitative findings support qualitative research findings reported in Thompson (1997 p.68). Firstly, during and after a project, anyone in the contractor's team should always be careful about what they say, and to whom. It is felt that far too often people say things that they should not, to the wrong people. This breaks confidences that exist and thus undermines trust. Secondly, contractors who come forward with proposals for solving problems, or making what they see as necessary alterations at their own discretion, need to be constrained to a certain extent. This discussion reveals that contractors 'Discretion' ties in with their 'Competence' (Section 7.2.7.2) 'Fairness' (7.2.7.5) and 'Integrity' (7.2.7.6), insofar as trust is affected by clients' perception of the contractors' performance against expectations, that they will deliver what they say they will, whilst behaving equitably.

7.2.7.5 Fairness and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}5}$ REJECTED

This variable addresses how reasonable the contractor is where variations/alterations arise. How fair contractors are when reporting costs incurred for claims purposes, and their readiness to accept responsibility for costs incurred by their own mistakes. Over simply defined by Hannah (1991 p.6) as, 'equitable and impartial treatment', in this research contractor behaviour with regard to 'Fairness' also considers whether they are behaving opportunistically or not. Risk of opportunism leads to greater cost in terms of pre-qualification and selection (Stump and Heide, 1996 p.432 & 437) and the need for monitoring (1996 p.433, Loosemore, 1999 p.186 Section 3.2.4). If a contractor is seen to behave fairly (less opportunistically) and with 'Discretion' (Section 7.2.7.4) it may be possible to reduce the level of monitoring (Section 7.2.3.2). As a form of empowerment, this could leave contractors who are closest to the work, and knowing best, to perform their task, a principle important in partnering (Rutland, 1994 *in* Williams, 1997 p.219), 'which implies a level of trust between companies'.

A strong and highly significant correlation of r = 0.73 (n = 124, p <= 0.000) between 'Fairness' and 'Past Trust Behaviour', shows this variable to be a key descriptor of a contractor's behaviour having affect on a client's perception of a contractor's past trustworthiness. The finding complements other work with CTI (Butler, 1991 p.659; Hannah, 1991 p.43; Fletcher and Peters, 1997 p.529). In addition, Alpha coefficient results place this variable within the contractors' Output/ability behavioural dimension (Table 6.9 - Chapter 6). It therefore relates to Frazier's (1983 p74) principle of 'Outputs' and once again confirms Fletcher and Peter's (1997 p.529) allocation of this variable into their 'Ability' dimension of trust. As with 'Availability', 'Competence' and 'Consistency', it affects the building or undermining of client decision-makers' perception in contractors' trustworthiness, and relates directly to a client's level of satisfaction or dissatisfaction with a contractor's output performance in relation to this behavioural condition.

Once again, as with 'Discretion', Wong et al (2000 p.801) and Woodward and Woodward (2001 p.369), in examining management-employee trust within the contractor organisation, failed to identify 'Fairness' and the problems associated with opportunism. Likewise, many researchers of trust outside the construction discipline have also failed to identify 'Fairness or Opportunism' in relation to trust (Smeltzer, 1997; Doney and Cannon, 1997; Handy, 1995; Anderson and Weitz, 1989, Swan et al, 1985).

However, the findings do complement Mitchell et al (1998 p.161) who identified 'Fairness' as an antecedent to trust, in their 'Affective' (performance) grouping. In summarising (p.168) they retained 'Fair-mindedness' as one of seven remaining variables that correlated highly with trust. Mayer et al (1995 p.719 &720) refer to a, 'stronger sense of justice' within their 'Integrity' factor for trustworthiness, derived, 'from credible communications about the trustee (the contractor in this case) from other parties'. This

highlights the potential for third party referents (Section 7.2.5) to affect client decision-makers' perception of contractor behaviour and trustworthiness by giving their views on the likelihood of the contractor behaving opportunistically.

This finding also goes someway to supporting Kumar's (1996 p.105) views of fairness in relation to procedural justice, asserting that pursuing what is fair is a guiding principle towards the creation of trust, as opposed to pursuing self-interest in abuse of power relationships. If client decision-makers can be reassured that contractors are not behaving opportunistically (Nooteboom et al, 1997 p.310 - Section 3.2.4), trust may develop, resulting in the reduction of monitoring identified under Expectancy-value (Section 7.2.3.2). Morgan and Hunt (1994 p.25) posited, 'that when a party believes that a partner engages in opportunistic behaviour, such perceptions will lead to decreased trust'. They go on to express that this decreased trust undermines commitment in a relationship. These findings complement Morgan and Hunt's (1994 p.25) in that if the client decision-maker perceives the contractor to be behaving opportunistically and therefore, unfairly, this would undermine any idea of a successful project (Section 7.2.3.3 and 7.2.3.3).

Earlier qualitative research (Table 5.2.1 – Chapter 5) had showed that fairness rarely exists, with fears being raised that 'contractors are always trying to get away with what ever they can'. However, the generalisable quantitative findings in this research suggest this is no longer the case (Section 7.2.1 and 7.2.2). All 'Fairness' items utilised in the survey negatively correlated with the statement, 'You generally found the contractor to behave unreasonably where problems occurred, always trying to get away with what he could'. Recent reports show how some clients and contractors, like Vodafone and Bovis (see Section 7.2.3.1) are trying to work, 'in a spirit of co-operation and trust'. Contracts allow for greater flexibility in the client-contractor relationship and claims are dealt with efficiently. 'People are forced to concentrate on solutions' (Greeman, 2002 p.19).

This discussion also reveals that contractors' 'Fairness' ties in with their 'Discretion' (Section 7.2.7.4) and 'Integrity' (7.2.7.6). Insofar as trust may be affected by a client's perception of the contractor's ability to use their own judgement, without requiring constant monitoring, and whilst remaining equitable and honest.

7.2.7.6 Integrity and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}6}$ REJECTED

This variable essentially deals with honesty. Overlapping with 'Discretion', 'Fairness' and 'Openness', it considers contractor's own site-team taking responsibility for snagging their own work and the confidence the client has in the taking their advice. All items in the survey negatively correlated with the statement, 'During the project you or your representative felt the contractor sometimes disguised the facts or their true position on important issues'. This variable was originally defined by Hannah (1991 p.6) as, 'Honest and moral character'.

With a very strong and highly significant correlation of $r = 0.83$ ($n = 124$, $p <= 0.000$) between 'Integrity' and 'Past Trust Experience', this variable can be described as jointly (with 'Consistency') the most important descriptor of a contractor's behaviour affecting a client's perception of a contractor's trustworthiness. The result complements others work with CTI (Butler, 1991 p.659; Hannah, 1991 p.43; Fletcher and Peters, 1997 p.529). Alpha coefficient results place this variable within the contractors' Input/intent behavioural dimension (Table 6.9 - Chapter 6). It therefore relates to Frazier's (1983 p74) principle of 'Inputs' and, once, again confirms Fletcher and Peter's (1997 p.529) allocation of this variable into their 'Motivation' dimension of trust.

Some researchers into trust, outside the construction discipline, have failed to recognise either 'Honesty' or 'Integrity' (Doney and Cannon, 1997; Brock-Smith and Barclay, 1995; Anderson and Weitz, 1989). However, these findings do complement Woodward and

Woodward (2001 p.369), who consider the merits of 'Honesty' in relation to trust within the contractor organisation, and highlight the importance developing open and honest dialogue if the contractor is going to be able to develop multi-disciplinary teams (Section 7.2.7.3). Wong et al (2000 p.803) also recognised the importance of 'Integrity'. However, this was defined more in terms of 'Promise-fulfilment' and 'Consistency'. The findings also complement the work of Smeltzer (1997 p.42), who shows 'Honesty' as a behaviour indicating a trusting environment between buyers and sellers. He also raises 'Lying' and 'Bluffing' as indicators of dishonesty, which erode trust between buyer and seller. However, at the same time, Mitchell et al (1997 p.168), in testing the relationship between 'Integrity' and trust across a number of different sectors, chose to drop the 'Integrity' variable. They did however retain a 'Truthfulness' variable (p.168), thus supporting Smeltzer's (1997 p.42) findings on the negative effect of 'Lying' and 'Bluffing'.

Given that the findings in this research have placed 'Integrity' within the contractors' 'Motivation' dimension of trust (see above) then, in line with Mayer et al (1995 p.719), clients may need to consider a contractor's motivation to lie. In accordance with Frazier (1983 p.74), if the result of the contractor's willingness to advise the client is dependent upon them expecting an undue level of reward, thereby being inequitable, the contractor's apparent behaviour with regard to integrity would be flawed, and therefore undermine trust. To reduce concern, it seems appropriate that when the client decision-maker views the contractor as behaving honestly enough to place their confidence in the advice they are giving, this should be supported by the contractor's willingness to communicate at a suitably high level of 'Openness' (Section 7.2.7.8). This also complements Expectancy-value findings (Section 7.2.3.1). It tells us that 'Integrity' and 'Openness', whilst addressing different aspects of contractor behaviour said to effect perceived trustworthiness, should also be closely allied to one another. This

interpretation of events is further supported by Swan et al (1985 p.207), who in examining buyer trust of salespeople, link honesty with being openly candid about the merits of the company or products being offered.

This finding also confirms qualitative research reported in Thompson (1997 p.69) stating that this variable, 'is considered to be enormously important if contractors are to develop trust from clients'. Associated with honesty and dishonesty by the contractor two key areas were identified:

1. *Breach of integrity through inducements, cover-ups, non-disclosure when important, misinformation and failure to adhere to regulations.*

In this instance, a direct link can be drawn with the Expectancy-value findings (Section 7.2.3.1) identified by client decision-makers. A consequence of having confidence in a trustworthy contractor is, 'fewer problems with the disclosure of information between the contractor, my agent and myself'. Once again, as stated above, this reflects Mayer et al's (1995 p.719) discussion of trust in which they talk about 'trustworthiness in terms of the trustee's motivation to lie'.

2. *Contractor integrity in snagging own work, rather than waiting to see if the client spots a problem which leads to the client into having to be meticulous and difficult.*

This ties in with both expectancy-value findings (Section 7.2.3.2) insofar as whether, 'Less monitoring of Contractors' performance in terms of quality checks would be needed' and other conditions of trust such as 'Discretion', 'Fairness' and 'Openness'.

This discussion revealed links between 'Integrity' and 'Discretion' (Section 7.2.7.4) 'Openness' (7.2.7.8) and 'Fairness' (7.2.7.5). This, where trust is affected by a client's reliance on a contractor's judgement about when it is appropriate to inform the client of problems, should they arise. Relying on that judgement rather than constant monitoring requires that the contractor remain equitable, honest and suitably open.

7.2.7.7 Loyalty and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}7}$ REJECTED

This variable is unusual insofar as loyalty is a concept, which generally applies to clients rather than contractors. However, when viewed in terms of overlap with other trust conditions, such as Availability, Discretion and Integrity, combined with some criteria identified in qualitative research findings, this condition of trust starts to take form. Issues include, whether the contractor allowed other client contracts to interfere with this client's project, or in light of issues identified in other conditions of trust, did the contractor in anyway behave opportunistically, and finally, did the contractor's employees do anything that reflected badly on the client. Defined by Hannah (1991 p.6) as, 'Having motives for protecting and making the target person look good'. Whilst in this research the focus is on the client decision-maker perspective, this variable relates to the client organisation generally, including, 'the avoidance of behaviour likely to reflect badly on the client', it also includes contractors' willingness to treat the client organisation preferentially.

With a strong and highly significant correlation of r = 0.78 (n = 124, p <= 0.000) between the sum of 'Loyalty' items and 'Past Trust Experience', this variable can be described as being one of the most important descriptors of a contractor's past behaviour having affect on clients' perceptions of contractor trustworthiness. The result complements others work with CTI by including 'Loyalty' (Butler, 1991 p.659; Fletcher and Peters, 1997 p.529), across different types of relationship as well as Hannah's (1991 p.44) application of CTI in the US where the constructor should avoid, 'using mistakes against the client', or, 'taking advantage of the client' (p.44).

Alpha coefficient results place this variable within the contractor's Input/intent behavioural dimension (Table 6.9 - Chapter 6). It therefore relates to Frazier's (1983 p74) principle of 'Inputs', and once again confirms Fletcher and Peter's (1997 p.529)

allocation of this variable into their 'Motivation' dimension of trust. This reveals that client decision-makers view those aspects that are defined above as relating to this condition of trust, as important in developing or undermining client decision-makers' perception of contractor trustworthiness, and possible trust behaviour toward them. This is viewed by the client decision-maker as an investment by the contractor in the relationship with the client, insofar as the contractor will avoid opportunistic behaviour, and not allow other contracts to distract attention away from the client's project.

These findings are in contrast to earlier qualitative work (Thompson, 1997 p.69), which generally considered loyalty not to be an issue, in that clients did not expect loyalty from contractors. Unlike other conditions of trust, loyalty from the contractor appeared inappropriate in determining level of trustworthiness. However, the quantitative findings do support the idea that a contractor must give the job the attention needed, and where it is not possible question whether they should be bidding in the first place.

This unexpected finding is made all the more important for client-contractor trust relationships, given that many researching trust, outside the construction discipline, have failed to recognise its significance (Michell et al, 1998; Doney and Cannon, 1997; Brock-Smith and Barclay, 1995; Anderson and Weitz, 1989, Swan et al, 1985). Anderson and Weitz (1989 p.318) made no reference to loyalty. Michell et al (1998 p.161) did test items such as 'Caring', 'Dependability' and 'Benevolence', but 'Dependability' was the only one retained at the end (p.168). Even then, it was defined more in terms of the suppliers' intention to provide similar levels of service quality, a construct covered more appropriately under 'Consistency' in this study. Doney and Cannon (1997 p.48) mention a, 'supplier concern for customers' but this was associated more with reputation rather than clear evidence of a particular behaviour that raises perceived trustworthiness.

Brock-Smith and Barclay (1995 p.22) only go as far as to mention 'mutual satisfaction'. Swan et al (1985 p.206) refer to industrial salespersons dependability or reliability.

However, Handy (1995 p.46) in examining trust within virtual organisations, states, 'When trust proves to be misplaced – it is not because people are deceitful or malicious but because they do not live up to expectations, or cannot be relied on to do what is needed'. Smeltzer (1997 p.43) talks about, 'Lack of commitment to a contract', thus eroding trust in terms of failure to meet delivery dates and other amendments, changes and inconsistencies with the contract. Whilst this relates to supplier-buyer exchanges for industrial goods, it reflects the type of problems clients might experience with contractors who as construction service providers, allow other client contracts to interfere with this client's project, are claims orientated and behave opportunistically, or are simply unavailable when needed. Or as Handy puts it, cannot be relied upon. Smyth (2000 p.226) whilst mainly focusing on loyalty from the client side of the exchange relationship, refers to Thompson (1996 p.69) recognising the principle of developing contractor loyalty towards the client, by way of construction service provision that matches client requirements as and when needed, rather than only being available and seeking client business when the contractor needs it (e.g. during a recession).

However, there are constraints. Bresnen and Marshall (2000 p.829) highlight in their conclusions on building client-contractor partnerships, 'constraints may need to be overcome, including difficulties in providing continuity of work (important for contractor *commitment* - a principle similar to the 'Contractor Loyalty' being introduced here)'. 'Clients may be able to deal with the continuity problem by smoothing peaks and troughs in work load' (p.829). This relates to co-operation, and the ability of clients and contractors to develop longer-term relationships. It also supports the idea posited here that contractor loyalty impacts on clients perception of their trustworthiness.

7.2.7.8 Openness and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}8}$ REJECTED

This variable addressed the level of transparency in information the contractor provides to the client decision-maker and the client agent. This item focused on the contractors' quantity surveyor and their level of willingness to show how price and additional costs are arrived at. The overall principle being tested here included the degree to which client decision-makers viewed contractors' performance in relation to disclosure of timely and important information about the project, even when it might reflect badly on the contractor. Defined by Hannah (1991 p.6) as, 'Levelling and expressing ideas freely'.

A strong and highly significant correlative result of r = 0.67 (n = 124, p <= 0.000) between contractor 'Openness' and 'Past Trust Experience' also revealed this category to be a key descriptor of contractor behaviour having an effect on clients' experience of contractors' trustworthiness. This finding supports Butler's (1991 p.657) inclusion of 'Openness' within the Condition of Trust Inventory. Its inclusion also complements findings from Hannah's (1991 p.43) application of CTI in the US construction industry. Although Fletcher and Peters (1997 p.529) chose not to utilise this variable in their application of CTI, in accordance with their use of Alpha coefficient tests, results from this research placed the 'Openness' variable within the contractors' Input/intent behavioural dimension (Table 6.9 - Chapter 6). It is therefore in accordance with Frazier's (1983 p74) discussion of 'Inputs'. This means that where contractors behave in an open way regarding free disclosure of timely and important information, which may or may not reflect badly on them, it is viewed as an investment in building trust, in them by others on the project. The question that the client decision-makers might ask themselves is, what are the contractor's motives for being open, and to what extent is the contractor also being fair and honest when doing this? Likewise, contractors need to recognise that these variables may well be perceived as inter-linked if trust is to be developed.

This also relates directly to the 'Expectancy-value' (Section 7.2.3.1) findings regarding consequential beliefs and having confidence in a trustworthy contractor, and complements work on trust in other sectors. Mayer et al (1995 p.718), in examining the literature (Farris et al, 1973; Gabarro, 1978 and Hart, 1986) shows 'Openness' as the key antecedent of trust placing it within their benevolence factor for perceived trustworthiness (p.723). Kumar (1996 p.105) asserts the importance of the need for contracts to be more, 'open, or informal and long-term' compared to, 'closed, or formal, detailed and short-term' if companies are to be able to move from a position of dependency on power rather than the development of trust. In construction this would represent a move away from practices such as Williamson's (1975) 'Legal Ordering' (Section 3.2.4), and towards the contracts used by Bovis and Vodafone which provide greater flexibility in their client-contractor relationships (Greeman, 2002 p.19). Smeltzer (1997 p.42) refers to 'Open Communication' as a trust enhancing behaviour and inversely 'Poor Communication - such as unwillingness to discuss price increases' as a trust eroding behaviour' (p.43). Doney and Cannon (1997 p.48) identify supplier firms' willingness to share confidential information. Morgan and Hunt identified a positive relationship between 'Communication' and 'Trust' in establishing, developing and maintaining successful relationship marketing strategies within the comparatively simple automobile tyre retail sector. Finally, Löfstedt and Frewer (1998 p.185) show how management attempts to cover up problems at a large nuclear power plant contributed strongly towards decreasing community trust.

These quantitative findings also support the earlier qualitative research (Thompson, 1996 p.69). This showed that, 'It is felt that contractors usually cover up problems, which means that clients have to find out for themselves. Often this means that problems are left until too late. Problems need to be communicated before becoming out of hand. Often

the question left in the mind of the client is, why was this not mentioned earlier'? This clearly links in with the other consequential beliefs found under the 'Expectancy-value Model' (Sections 7.2.3 & 7.2.3.1). Failure to disclose timely and accurate information would lead the client decision-maker to feel that it is necessary to continue monitoring contractor performance if there is going to be a satisfactory conclusion to the project.

The qualitative findings also show openness is perceived as being good with regards costing, whether it be for initial bids or variations. Where a contractor can show what they have done and how they have arrived at a price this is considered to be positive. Where the contractor is reluctant to do this, clients cannot help feeling something is wrong. This behaviour needs justification if the client is not to feel they are being ripped-off'.

7.2.7.9 Promise-Fulfilment and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}9}$ REJECTED

This variable addresses contractor behaviour with regard to performance meeting expectations that have been raised during tender and post-tender negotiations, during site meetings and through obligations expected of the contractor after completion during the defects liability period. Defined by Hannah (1991 p.6) under the term Credibility as, 'belief that one will fulfil promises'.

Results showed a very strong and highly significant correlative result of r = 0.82 (n = 124, p <= 0.000) between contractors' 'Promise-fulfilment' and 'Past Trust Experience'. Revealing this category to be the joint second (with Receptivity) highest ranking descriptor of contractor behaviour after 'Integrity' and 'Consistency' (joint highest ranking categories), having an effect on client perception of contractor trustworthiness. Inclusion of 'Promise-fulfilment' complements previous applications of CTI (Butler, 1991 p.657;

Fletcher and Peters, 1997 p.529), especially Hannah's (1991 p.43) application in the US construction industry.

Alpha coefficient results place the 'Promise-fulfilment' variable within the contractors' Output/Ability behavioural dimension (Table 6.9 - Chapter 6) and therefore supports Fletcher and Peters (1997 p.529) positioning of this condition within their 'Ability Dimension of Trust'. It also accords with Frazier's (1983 p.74) principle of 'Outputs'.

Furthermore, these findings tie in with Wong et al's (2000 p.803) discussion regarding their positive correlation found between 'Trust' and 'Promise-fulfilment' from the Singapore public sector construction project management agency perspective. Firstly, by recognising Rotter's (1967 p.651) definition of trust as the, 'expectancy held by an individual or group that a promise, whether in a verbal or written statement, of another individual or group can be relied upon'. This principle is then encapsulated in what they choose to refer to as the 'Integrity' antecedent of trust, defined as;

(a) a degree of consistency in words and actions, and
(b) follow through on commitments and promises.

Whilst this definition underrates the important additional contribution made by the conditions of 'Consistency' and 'Integrity', as defined more deeply in this research (Sections 7.2.7.3 and 7.2.7.6), it does reflect the importance placed in 'Promise-fulfilment' by project management agencies in the public sector of the Singapore construction industry. It also supports the idea that no condition of trust exists independently of the others. Also, whilst Wong et al's (2000 p.803) findings relate to a public sector project management company perspective, it suggests that similarities could potentially exist in the conditions of trust expected from both public and private sector clients in the UK construction industry. Whilst the UK public sector client perspective is beyond the focus of this research, it raises questions that future research might address.

With regard to trust research outside of the construction literature, the importance of 'Promise-fulfilment' is one variable that some failed to identify (Bhattacharya et al, 1998 p.459; Michell et al, 1998 p.160; Brock-Smith and Barclay, 1995 p.25; Handy, 1995 p.44; Mayer et al, 1995 p. 709; Anderson and Weitz, 1989 p.320). Michell et al (1998 p.160) did refer to trust as being an implied contract with mutual expectations and perceived obligations on one hand, and the trustees expertise to perform effectively and reliably on the other. However, there was nothing in their findings with regard to these issues, especially to promise-fulfilment. Brock-Smith and Barclay (1995 p.25) only touched upon dependability and reliability in understanding mutual satisfaction within effective selling alliances. Anderson and Weitz (1989 p.312) go no further than referring to Kronman (1985), stating, 'At the most basic level, one party must undertake actions before the other party and thus must rely on the other party to honour its commitments'. However, the findings do complement other trust literature on the issue of 'Promise-fulfilment' (Smeltzer,1997 p.46; Doney and Cannon, 1997 p.49; Kumar, 1996 p.95; Morgan and Hunt, 1994 p.24-5; Swan et al, 1985 p.206). Smeltzer (1997 p.46) highlights, in relation to trust, an important link between exceeding expectations and the effect this has on longer-term reputation. This clearly relates to the importance of reputation identified in this research (Table 2.3 - Chapter 2, Sections 7.2.3.4 and 7.2.3.6), and implies how seriously the failure to fulfil promises, which in part act toward setting expectations, can affect one's ability to develop trust in future.

The finding also supports the work of Doney and Cannon (1997 p.49), who asked respondents in relation to their trust of sales people, to what extent the sales person did not make false claims. They were of the opinion that, 'buyer's trust sales people they perceive to be expert, perhaps because they think expert sales people can deliver on their promises'. This point highlights the importance of 'Promise-fulfilment' in the context of

the 'Consistency' discussion earlier (Section 7.2.7.3), and the importance of the link between promises or commitments made by sales people during post-tender negotiations and contractor performance later during the project. Kumar (1996 p.95), in discussing trust within manufacturer-retailer relationships, states, 'The immediate response of most managers was that trust involved dependability - that they believed that their partners were reliable and would honour their word'. He goes on to say, 'Of course, honesty and dependability do not always promote trust. A partner that frequently promises to punish you and always follows through is honest and dependable but is not a company in which you place your trust'. This clearly demonstrates that, 'Promise-fulfilment' must comply with other aspects of the Conditions of Trust Inventory (CTI). With regard to contractors, it is clear that some may have developed a reputation for being adversarial and claims driven, and that clients can learn to expect this from them. However, in this study clients have reflected on a contractor's behaviour in areas such as, 'Competence', 'Consistency', 'Fairness' and 'Integrity', finding them to be good indicators of behaviour that could help develop trust. Where 'Promise fulfilment' is concerned, previous experience would lead them to expect the contractor to perform well in relation to these areas if trust is to develop.

Morgan and Hunt (1994 p.23) refer to Rotter (1967 p.651), who defined trust in terms of, 'a generalised expectancy held by an individual that the word of another will be relied on'. They then go to talk about opportunistic behaviour, quoting Williamson (1975 p.6), who defined this as, "Seeking self-interest with guile". They continue, quoting, "the essence of opportunistic behaviour is deceit orientated violation of implicit or explicit promises about one's appropriate or required role behaviour". The findings have shown that promise-fulfilment plays an important part in developing or undermining trust in the contractor. Contractors who are intent on deceiving the client in order to gain short-term

advantage seriously undermine future trustworthiness and therefore, if not black listed, will be subject to greater pressure from 'Legal Ordering' (Williamson 1975 - Section 3.2.4) and monitoring of performance. For example, a contractor who deliberately submits a low bid for work (promises a competitive price), with the intention of ambushing the client with claims later on, is both deceitful and opportunistic. This seriously undermines future trust in that contractor, raising the likelihood of stricter risk reducing control on them in future, and will also undermine their reputation and increase their level of difficulty in getting work in future.

Swan et al (1985 p.204) highlight the relationship between trust and promises made. In relation to this, they express the affect that establishing expectations and then demonstrating dependability has on trust (p206) stating, 'the first factor in showing dependability can be expressed as: Tell the customer what you will do on the first call and then do what you said you would do'. 'Customer perceptions of salesperson dependability increase directly with the number of occasions where expectations are confirmed'. This principle is shown to be as important in construction as with an ordinary industrial supplier-buyer situation. However, in construction the exchange process is far more complex than the simple provision of goods or material to an industrial buyer. It requires the contractor to regard 'Promise-fulfilment' as being important at all stages of their involvement in the project. This starts from managing expectations arising from reputation when being short listed for tender (Table 2.3 -Chapter 2), through promises and commitments made to the client in the bids they submit, during post-tender negotiations, site meetings and even post commissioning and hand-over follow-ups, leading to the possibility of projects in the future. This is especially important where strategic partnering is concerned. The findings therefore show that the role of 'Promise-fulfilment' in the formulation of trust is as important in construction as other sectors,

such as manufacturing or retailing. However, its management is far more involved given the complex involvement of the contractor throughout the project.

These quantitative findings also support qualitative findings reported in Thompson (1997 p69). In this 'the client wants to feel confident that the contractor will do what they have agreed. It is about achieving results. This can be seen in what the contractor says they will do during the pre-qualification through to post-tender negotiation stages of the project development process, and what they achieve in practice, during construction through to any follow up work during the defects liability period'.

7.2.7.10 Receptivity and Past Experience – Null-Hypothesis$_{0\text{-}7\text{-}10}$ REJECTED

This variable addresses the extent to which, the contractor has understood the client's requirements for the project, whether they were responsive to the client's problems and requests during construction, and then act decisively when needed. Defined by Hannah (1991 p.60 as being, 'Open to communication and ideas'. This goes beyond a contractor who just focuses purely on constructing the building in accordance with a design. Whilst this is important, the way the contractor interacts with the client, is receptive to their problems, and works as part of a team to solve them, augments that core requirement to simply build according to design (Section 2.1.2). As Greeman (2002 p.18) highlights in his report on the 'Bovis-Vodafone' project currently underway, the client is, 'not looking for a contractor, but a construction service provider'. Smyth (2000 p.295 *in reference to* Thompson 1997 p.69) states, 'Receptivity is the ability to listen and understand the ideas and demands of the client'.

A very strong and highly significant correlative result of $r = 0.82$ ($n = 124$, $p <= 0.000$) between contractor 'Receptivity' and 'Past Trust Experience' reveals this category to be the joint second (with Promise-fulfilment) highest ranking descriptor of contractor

behaviour after 'Integrity' and 'Consistency' to be affecting decision-makers' perception of contractor trustworthiness. Inclusion of 'Receptivity' complements previous applications of CTI (Butler, 1991 p.657; Fletcher and Peters, 1997 p.529), especially Hannah's (1991 p.43) application in the US construction industry.

Alpha coefficient results place the 'Receptivity' variable within the contractors' Input/intent behavioural dimension (Table 6.9 - Chapter 6) and therefore supports Fletcher and Peters (1997 p.529) positioning of this condition within their 'Motive/intent Dimension of Trust'. It also accords with Frazier's (1983 p74) principle of 'Inputs'.

Once again, as with the other conditions of trust, these quantitative findings have been supportive of qualitative findings reported in Thompson (1997 p.69 and Smyth, 2000 p.295-6). In this it states, 'This goes beyond simply wanting building work carried out. Trust will also be influenced by how receptive the contractor is toward dealing with requests, challenges and problems'.

In comparing with Wong et al's (2000 p.803) research findings on perception of trust, during projects in Singapore some commonality is found with these findings on 'Receptivity'. With their emphasis on a limited definition of 'Competence' (compared to this research - Section 7.2.7.2), they consider the relationship between 'Trust' and 'Demonstrating Concern'. Defined as, 'feeling that they were part of the team and share a common vision', this was found to be present where trust existed. Whilst this does not relate directly to the private building sector of the UK construction industry, once a gain it suggests that the conditions of trust demanded from clients could be similar in both public and private sectors. Also, as with the other conditions of trust, in comparing these findings with existing trust literature relating to other sectors, differences are found in the level of importance given to supplier (contractor) 'Receptivity'. Some simply fail to

recognise the importance of 'Receptivity' in relation to trust (Kumar, 1996; Handy, 1995; Morgan and Hunt, 1994; Anderson and Weitz, 1989, Swan et al, 1985). Others, in researching trust in different sectors, have considered similar constructs (Michell et al, 1998 p.161; Doney and Cannon, 1997 p.38; Smeltzer, 1997 p.42-3; Mayer et al, 1995 p.719; Brock-Smith and Barclay, 1995 p.22).

Michell et al (1998 p.161), in investigating trust across a number of diverse sectors (Manufacturing, retailing, financial services), considered Arrow's (1974) principle of 'Caring'. 'A caring attitude may assist partners in choosing the necessary behaviour for a new situation' (p.170). Their findings failed to link this to trust (p.168). However, Doney and Cannon (1997 p.38), in investigating industrial buyer-seller relationships considered, 'Supplier's willingness to customize' as a factor which invokes the trust building process. This was found to have a positive impact on buyer firms trust (p.44). Smeltzer (1997 p.42-3) in looking at trust within supplier-buyer alliances and partnerships, highlighted the important role that one's effort in, 'listening and reacting to problems' has on the enhancing or eroding trust behaviour. Mayer et al (1995 p.719 & 723), in speculating upon trust within organisational teams, refer to Jones et al (1975) under their benevolence construct, suggesting, 'confidence and trust in a leader are influenced in part by the extent to which the leader's behaviour is relevant to the individual's needs and desires'. Brock-Smith and Barclay (1995 p.22), in examining trust within effective selling alliances, identified the important role played by constructs such as, 'knowing the customers business' and 'adapting to situations' if managing organisational differences in order to achieve trust was to be possible. Findings regarding client decision-makers' views of contractor 'Receptive' behaviour, identified as affecting the level of perceived contractor trustworthiness, complement the findings found in relation to industrial buyer-seller relationships and team work. All of these may be considered important within the

complex exchange process between clients and contractors that exists throughout the development of the construction project.

7.3 Summary Discussion of Results Relating to Overall Modified Reasoned Action Model.

This section will briefly summarise the chapter, drawing attention to relevant points in the thesis. A final concluding statement and recommendations for future research are presented in chapter 8.

The discussion of literature revealed the importance of developing confidence-based trust, rather than risk-based trust, by clients toward contractors (Figure 3.1 - Chapter 3). Ali (1994 p.119) identified key criteria said to affect buyer confidence when procuring professional services, such as those of a building contractor (Section 3.1.2). These criteria were examined in a logical and systematic way, from a client decision-maker's perspective, utilising Ajzen and Fishbein's (1980 p.100) Reasoned Action Model combined with Butler's (1991 p.643) Conditions of Trust Inventory (Table 7.1 at beginning of this chapter). The Reasoned Action Model being a development upon the original Expectancy-value Model, to include a 'Normative' (or Referent) influence. Research concentrated on the large, private new build and refurbishment sector of the UK construction industry. An interpretation of those results in relation to the literature has been executed in line with carefully worded Null-Hypotheses for each section. Both results and discussion were presented through a gradual build-up of models, starting with Expectancy-value, then Reasoned Action and finally the Modified Reasoned Action Model.

Expectancy-value Findings: Summarised in more detail under Section 7.2.3.5 and relating to **Hypotheses 1, 2** and **3**, these revealed current client decision-makers' Behavioural Intention (BI) toward future trust in a familiar contractor with whom they

have had recent experience (Figure 6.4 and Section 7.2.1). They also revealed current attitudes and consequential beliefs that best aid understanding of this Behavioural Intention (BI) (Sections 7.2.2 and 7.2.3). The findings show that, whilst client decision-makers currently view trust as important, they are cautious. Discussion of the findings in relation to literature suggests that they are experimenting to see how reasonable and beneficial this is under the current culture and climate of the UK construction industry.

Reasoned Action Findings: Summarised in more detail under Section 7.2.5.6 and relating to **Hypotheses 4 & 5,** these reveal that inclusion of the 'Normative' component made a dramatic contribution toward understanding Behavioural Intention (BI) (Figure 6.5 and Section 7.2.4). Revealed as the dominant influence on Behavioural Intention (BI) over the Expectancy-value findings, this confirms the idea that client decision-makers are not currently convinced of their contractors' trustworthiness, choosing to rely heavily on the opinions and advice given them by key referent parties (Section 7.2.5). Whilst the client decision-maker continues to depend upon intermediary advice where trust is concerned a trust gap exists, making the contractors job of building trust more difficult. It means that trust in the contractor by the client decision-maker involves a number parties within Cherns and Bryant's (1984) Temporary Multi-organisation, thus making trust as complicated as the exchange process in which it exists.

Modified Reasoned Action (Inclusion of CTI) Findings: Discussed in detail under Sections 7.2.6 and 7.2.7 relating to **Hypotheses 6 & 7**. Findings reveal that inclusion of an overall measure of Previous Trust Experience (PE) makes a contribution toward understanding Behavioural Intention (BI) (Figure 6.6 and Section 7.2.6).

When compared to earlier literature, such as Currall and Judge (1995 p.167) (Section 7.2.6), the findings confirmed that client decision-makers' positive Behavioural Intention

(BI) toward trusting a familiar contractor as a new development. This supports the interpretation of findings related to the 'Normative' part of the model, explaining why the decision-maker is so dependent upon referent advice. This interpretation of findings also complements the opinion by Sheppard and Sherman (1998 p.427) that, 'trust is partially a product of one's capacity to assess trustworthiness of one's potential partner'. UK construction management and marketing is currently devoid of any appropriate tools to help to address the trust gap that currently exists. This view is supported by Bresnen and Marshall (2000 p.820-821) who state, there is 'insufficient research into social science concepts such as trust between clients and contractors' (Section 7.2.7). This helps to explain why client decision-makers' reliance on their own attitudes and experience comes after the dependency upon referent influence. The combination of Reasoned Action and Conditions of Trust provide such a framework. Giving both clients and contractors appropriate tools to assess contractor trustworthiness. Findings in relation to Butler's Conditions of Trust Inventory (CTI) applied in this research, showed all ten conditions to be good indicators of contractor behaviour that currently either build or undermine client trust behaviour toward them.

The final chapter will now conclude by asking what has been learned from this? It will then go on to highlight implications for contractor relationship management strategies and provide recommendations for future research.

CHAPTER EIGHT

Conclusions and Recommendations

8.0 Introduction

The purpose of this chapter is to draw together the threads of argument that have been developed throughout the body of this work, and to summarise the progress that has been made towards answering the research questions posed. For the most part this will draw upon the discussion presented under each hypothesis, as set out in the previous chapter. Whilst this section addresses what has been done in the study and what the outcomes were, it does not demonstrate the contribution to knowledge. Therefore, the summary of findings will be examined in light of prior work, to determine how knowledge has been advanced by the research findings reported in this thesis.

The chapter is structured as follows. The reader's attention is directed back towards the original research questions and a summary of related findings is presented. A statement of contribution to both knowledge and method are made, and implications for construction marketing management explored. Finally, the limitations of this research are discussed, and some reflections on possible directions for future research are made.

8.1 The Original Research Questions with Summary of Related Findings

8.1.1 What are the Key Conditions of Trust a Client Decision-maker Expects from their Contractor's Behaviour?

Analysis and discussion relating to **Hypothesis 7 (H_7)** onwards under section 7.2.7 revealed that all ten categories within Butler's Conditions of Trust Inventory (CTI) are applicable where understanding clients' expectations of contractor behaviour is concerned, if client trust toward the contractor is to develop. Findings show that Integrity, Receptivity, Loyalty, Discretion and Openness all fall into the Input/Intent

dimension of contractor behaviour, whilst Consistency, Promise-fulfilment, Fairness, Competence and Availability are in the Output/Ability dimension (Table 6.9–Chapter 6).

8.1.1.1 The Input Dimension of Contractor Behaviour

The input or intent dimension relates to those aspects of contractor behaviour that reflect their motives. The way contractors behave in relation to those conditions of trust identified within this dimension impact on the client decision-maker's perception of the contractor's level of investment or willingness to develop client trust toward them.

- In this dimension, most importantly, the contractor must essentially be honest **(Null Hypothesis 7.6 $H_{0\text{-}7\text{-}6}$)**. This, is demonstrated through the contractor's own site-team taking responsibility for snagging their own work rather than covering up. Associated with truthfulness the contractor must avoid lying and bluffing. Over time the client may accept the contractor as behaving honestly enough to place their confidence in the advice they are being given by them.
- The contractor must also demonstrate their understanding of the client's needs for the project **(Null Hypothesis 7.10 $H_{0\text{-}7\text{-}10}$)**. This would start with the client's motivation for pursuing this project, and go on to include how responsive the contractor is, to client problems and requests during construction (Section 7.2.7.10).
- In those relationships the contractor deems important enough to develop long-term, in order to build trust the contractor must forego taking on other contracts that will interfere with the client with whom they wish to have a long term on-going relationship **(Null Hypothesis 7.7 $H_{0\text{-}7\text{-}7}$)**. Does the contractor treat this client as a preferential client? Also, does the contractor, as a construction service provider, match their provision of services with the requirements of the client as and when needed rather than only being available and seeking client business when the contractor needs it (See Section 7.2.7.7).

- Contractors must also use their discretion **(Null Hypothesis 7.4 $H_{0\text{-}7\text{-}4}$)**. Not only on deciding when to talk to the client and/or their consultants but also with regards to possession and disclosure of confidential or sensitive information about the client to outside third parties. Anyone in the contractor's team should always be careful about what they say and to whom. Breaking confidences that exist undermines trust (Section 7.2.7.4).

- Finally, the contractor needs to provide the client with timely and accurate information. This requires a degree of openness **(Null Hypothesis 7.8 $H_{0\text{-}7\text{-}8}$)**. Where contractors behave in an open way with regards free disclosure of timely and important information, which may or may not reflect badly on them. This can be viewed as an investment, on their part, to build trust in them by others on the project (Section 7.2.7.8).

8.1.1.2 The Output Dimension of Contractor Behaviour

The output or ability dimension, in contrast to investment behaviour, or behaviour indicative of willingness to develop trust under the input dimension, deals directly with the client decision-maker's level of satisfaction or dissatisfaction with certain aspects of the contractor's actual output performance.

- Here, most importantly, the contractor needs to ensure that on-project performance meets expectations raised during tender and post-tender negotiations, or from site meetings during the project. This has been shown to work in two ways:

  Firstly, there needs to be *consistency* **(Null Hypothesis 7.3 $H_{0\text{-}7\text{-}3}$)** between sales negotiating and site teams attitudes with regard to understanding project requirements beyond simply a need for a building. The client also expects consistency in the quality of work carried out between projects (Section 7.2.7.3).

  Secondly, contractors also need to fulfil the obligations they have openly led to client to expect through specific *promises* **(Null Hypothesis 7.9 $H_{0\text{-}7\text{-}9}$)** made.

- Similar to consistency, is promise-fulfilment **(Null Hypothesis 7.9 $H_{0\text{-}7\text{-}9}$)**. Different to the general maintenance of quality levels between projects or of attitudes between teams, to include actions that fulfil specific vocalised or written promises made before or during the project (Section 7.2.7.9).
- The contractor must also demonstrate fairness **(Null Hypothesis 7.5 $H_{0\text{-}7\text{-}5}$)**. They must work in both an equitable and impartial manner where alterations or problems arise during a project. They must avoid opportunistic behaviour where the reporting of unexpected costs are concerned and readily accept responsibility for their own mistakes (Section 7.2.7.5).
- To be able to develop trust, contractor's management ability and skills to tackle a client's particular project must be demonstrated at all levels from the contractor's company directors, down to the site management, and how relationships are managed with sub-contractors **(Null Hypothesis 7.2 $H_{0\text{-}7\text{-}2}$** - See Section 7.2.7.2).
- Lastly, someone responsible (e.g. contracts manager or project manager) has to be contactable as and when needed to deal with client enquiries, questions or problems as they arise during a project **(Null Hypothesis 7.1 $H_{0\text{-}7\text{-}1}$** - Section 7.1.7.1).

8.1.2 Affects on Willingness to Trust the Contractor

To what extent does a client decision-maker's willingness to trust a contractor relate to;

(i) a client's past experience of that contractor?
(ii) a client's beliefs about the outcomes of trusting the same contractor in future?
(iii) a client's overall attitude toward trusting a contractor?

8.1.2.1 Past Experience of Contractor

Analysis and discussion relating to **Null Hypothesis 6 ($H_{0\text{-}6}$** - Section 7.2.6), revealed that whilst past experience is shown to be having some affect on client decision-makers' behavioural intention to trust contractors' (Section 6.5), its affect comes third after attitude **(Null Hypothesis 2 $H_{0\text{-}2}$** – Section 7.2.2), and more importantly, referent

influence (**Null Hypothesis 4 H_{0-4}** – Section 7.2.4). The discussion revealed how findings indicate that, where trust is concerned, it is an asset that has not had time to develop.

- Findings and discussion demonstrate that client decision-makers' (CDM's) currently lack the confidence to depend upon their own experience of contractors' behaviour over and above the stronger influence received from key referent sources (see question 8.1.3 below).
- Developing trust within the client-contractor relationship is still in its early days. Due to the lack of certainty past experience affords other types of relationships and decision-making situations outside of the UK construction industry, the CDM remains dependent upon referent advice and reputation.
- This in part can be attributed to the lack of longevity in prior working relationships between the clients and contractors. For whilst the exchange period on any one project is extended, given a construction project's complex nature, where fragmentation continues to occur between projects this undermines the client's ability to realistically relate their past experience to new or forthcoming projects on any reliably consistent basis.
- Hence, longevity is lacking across a number of projects required for trust to be able to develop on the basis of CDM's own past experience. Strategic partnering sets out to overcome this allowing parties the opportunity to continually improve, through continued learning across a series of projects.
- The limited affect of past experience on willingness to trust the contractor can also be attributed to the recency in interest on trust between clients and contractors as a topic for investigation. Lacking the necessary constructs and/or research for deciding who might be a trustworthy contractor or not, CDM's have nothing upon which to base their past experience for comparative purposes across a series of projects (question 8.1.1 above).

- The importance in discovering a suitable set of constructs for research purposes is reflected in the success shown with Butler's input/output CTI categories (Section 8.1.1).

8.1.2.2 Beliefs About the Outcomes of Trusting Same Contractor in Future

Analysis and discussion relating to **Null Hypothesis 3** ($H_{0\text{-}3}$ - Section 7.2.3) revealed some interesting results:

- CDM's hold some moderately strongly held attitudes toward trusting their contractor (Discussed next), and these attitudes are supported by unexpected consequential beliefs. Contrary to expectations raised by some literature (Section 3.2), those consequential beliefs that presently best aid understanding current attitudes are more positive than speculation would have us originally think (Table 7.2).
- Findings, contrary to the literature (Section 3.2.1), show that CDM's have a more positive perspective toward the outcomes of trusting their contractor than the negative consequences originally expected. The strongest finding relating to this is demonstrated through the belief by CDM's that, where they can trust the contractor there would be 'fewer problems with the disclosure of information between the contractor, the client's own agent and the CDM themselves'. This finding is compliant with both the behavioural and co-operative based trust literature (Section 7.2.3.1) and Schlenker et al's (1973 p.419) definition of trust (Section 3.2.2). Furthermore, it supports findings from different environments outside construction, demonstrating an important link between trust and communication (Rackham et al, 1996 p.74; Smeltzer, 1995 p.43; Currall and Judge, 1995 p.165; Anderson and Narus, 1990 p.50). It also complies with Loosemore's (1999 p.186) first recommendation for reducing dispute escalation (Section 3.2.3).

- The second consequential belief shows that where CDM's can trust the contractor, 'less monitoring of contractors' performance in terms of quality checks' is needed. This is in contrast to the earlier literature and rhetorical speculation (Section 3.2.4).
- It shows where CDM's have previously distanced themselves from vulnerability through dependence upon constant monitoring, confrontational problem solving and legal ordering they are aware of a possibility to move away from purely traditional risk avoidance strategies, toward a more confidence based trust (Section 3.1.5 and 3.2.4).
- This complies with Moorman et al's (1993a p.82) definition of trust (Section 7.2.3.2). Furthermore, it supports others' work, from different environments outside construction, highlighting the important link between trust and control reduction, or confidence in another's ability and dependability to behave in some beneficial manner (Michell et al 1998 p.160; Mayer et al 1995 p.713; Ali 1994 p.118).
- The third belief item, which states that where trust exists, 'there is a greater likelihood of a successful project' also contrasts with some views previously reported (Section 3.2.1 and Hugh 1994 quoted by Loosemore et al 2000 p.447 in Section 3.2.3).
- The removed belief items also have a story to tell (Section 7.2.3.4). Whilst results for the most part were weak, they found that concerns about contractor opportunism, unfair profits or unreasonable expectations put upon the CDM to accept contractor would perform as agreed, are currently in contrast to current CDM attitudes toward trusting the contractor. These findings acted to further reinforce the positive consequential beliefs outlined above. Whilst these do not mean that ideas about gullibility, suspicion or perceived risk have been overcome, as results were only marginally on the positive side, they are indicative of a growing change in client perspective for the better.

8.1.2.3 Overall Attitude Toward Trusting Same Contractor in Future?

Analysis and discussion relating to **Null Hypotheses 2** and **3** (H_{0-2} - Sections 7.2.2 and H_{0-3} - Section 7.2.3) revealed that a majority of CDM's view trust toward contractors as, 'important', 'reasonable' and 'beneficial' (see Appendix E.2, E.3 & E.4). This unexpected positive view is in contrast to expectations raised from both the literature and common speculation (Sections 3.1.5 and 3.2). It reflects changing opinions on the part of clients', seeing trust behaviour toward contractors in a more positive light than may historically have been the case.

- This may have much to do with recommendations made by Latham (1994) and Egan (1998). It may also be due to the growing interest in Partnering (see chapter 2). Many authorities across different industries, including construction, have prescribed the importance of trust in Partnering (Smyth and Thompson, 1999 p.1, Thompson 1998 p.7 & 1997 p.65, Rackham et al 1996 p.74, Bennett and Jayes 1995 p.30, NEDC 1991 p.14, Anderson and Narus 1990 p.56).
- However, when attitudes are related to consequences there is less agreement among CDM's (Sections 7.2.3 and 7.2.2.2). In considering trust toward the contractor, CDM's have demonstrated their cognisance of risk, regarding the possible undesirable consequences of their act (Mayer et al 1995 p.712. Section 3.1.1). Given the opportunity to respond to a number of favourable and unfavourable possible outcomes (Ali 1994 p. 118) about trusting the contractor, results reflect an unexpected favourable perception by CDM's. They reveal favourable outcomes to be positively correlated with the strongly held attitudes, and unfavourable outcomes to be negatively correlated with those attitudes (Table 6.3. Sections 7.2.3 & 7.2.2.2). This presents a promising picture.

- However, in analysing these results it was necessary to drop the 'important' attitude scale. Furthermore, results are at best, satisfactory. This suggests willingness by CDM's currently to experiment with trust in order to assess just how 'reasonable' and 'beneficial' it is. Whilst findings strongly reveal CDM's consider trust to be 'important' they must first be reassured that it is 'reasonable' and 'beneficial' before the consequential beliefs can strengthen. At best, findings highlight how important effort on the part of contractors needs to be. There is still someway to go. This is a crucial time for contractors who, given the opportunity, need to work hard toward developing confidence-based trust.

8.1.3 To What Extent Does Key Third Party Referent Influence Affect Overall Client Decision-makers' Trust in Their Contractors?

The answer to this question has been addressed in the analysis and discussion under **Null Hypothesis 4** and **5** ($H_{0\text{-}4}$ - Section 7.2.4 and $H_{0\text{-}5}$ 7.2.5).

- Findings show that select third parties play a dominant influence over CDM's decision in whether or not they are likely to trust a building contractor. Relying on third party opinion, in line with Clark and Payne (1995 p.7), they currently lack the confidence to be self-reliant in their decision to trust the contractor.
- Suspicion and perceived risk, giving rise to possible conflict undermining trust in accordance with Labianca et al (1998 p. 62), are developed through inter-group dynamics, where positive and negative client perceptions of the contractor are amplified through intermediary influence (Section 3.2.6 & 7.2.4).
- Given referents identified in this research (Sections 6.2 & 7.2.5), findings support the idea (Thompson 1996 p.86) that in TMO's, third party influence impacts on client perception of contractor trustworthiness during a project and, through reputation, in referral markets. This means two things:

First, reputation influences a CDM's trust in a contractor in the same way as being a key pre-qualifying criteria for short-listing potential contractors for tender and awarding contracts (Table 2.4). This does not mean that trust it self is a pre-qualifying criteria. Contracts may be awarded where trust does not exist. However, where this is so, the exchange relationship is likely to exist in an environment of suspicion, perceived risk, strong monitoring and control, underpinned with strict legal ordering. This shows that, as with pre-qualifying criteria, reputation is important in developing trust and must therefore be managed carefully.

Secondly, that CDM's may be using referent advice in line with Ford et al's (1998 p.59) view that this dependency reduces complexity in the decision-making process. Complexity is certainly a problem in the complex exchange system that exists within the TMO.

- If so, then in-line with Bennett (1999 p.4), there is a danger CDM's are currently organising and structuring their thoughts and activities with regards trust toward the contractor, and thus how they manage their relationship with them, based on quickly made judgements with little thought (Bennett, 1999 p.4). Given the uncertain and complex environment client decisions are being made in, the likelihood of errors in judgement based on incomplete or uncertain information from key referents is high (Skitmore et al 1989 p.105 - Section 3.2.2).
- Combine this with Labianca et al 's (1998 p.55) amplified intermediary influence through inter-group dynamics and it can be seen that the contractor's ability to develop CDM's trust is made very difficult. Through the referent groups identified, the focal relationship (figure 2.1 - chapter 2) between client and contractor is compromised. Whilst this intermediary influence has the potential for helping trust develop, it can also be very damaging.
- The biggest difficulty faced by the contractor is in overcoming this divide that exists between themselves and the client where trust is concerned. This requires contractors to manage the relationships they have with the main referents influencing CDM's.

The four key referents identified are (Sections 6.2 and 7.2.5):

- The architect
- Colleagues from within the client decision-maker's own firm
- Contractor's previous clients
- Sub-contractors to the main contractor

Each has a different influential effect on CDM's in terms of when they play a part and the nature of the advice they can give. Findings provide some insight (Sections 7.2.5.1 - 7.2.5.4) by revealing important links between all three parts of the Modified Reasoned Action Model. This consistency between the different parts of the model adds weight to the discussion findings.

- Finding that the architect is the strongest referent ties in with the expectation by CDM's that, where trust can exist between client and contractor there would be fewer problems with disclosure of information between the contractor, the client's own agent (the architect) and the CDM themselves. This in turn ties in with the need for greater integrity, receptivity, openness and availability in contractor behaviour.
- Better communication would lead to less need for monitoring contractor performance in terms of quality checks, which relates with a greater need for integrity, discretion, promise-fulfilment, fairness and evidence of competence. Success in these areas would lead to the third consequential belief, 'a greater chance of an overall successful project'.
- With success, clients are more likely to go away satisfied with the exchange relationship they have experienced with contractors. On-going successful projects and satisfied clients, over time should lead to contractors' past clients, and colleagues within the CDM's own firm, acting more as positive rather than negative advocates for the contractor (Thompson 1996a p.86 - Section 2.2 - Chapter 2). This links directly with the need for greater loyalty, consistency and competence, in order to reinforce the positive expectations of the contractor being formed.

- Finally, qualification for this growing confidence in the contractor must be reflected in sub-contractors' opinions (Section 7.2.5.4). They should also be experiencing an improvement in their exchange relationships with contractors where the main contractor is working toward a less destructive team approach. This would enable the CDM to see if what the main contractor says and does, actually filters down to the trade and craftsmen working on site.

8.2 Contribution: Knowledge and Method

In determining the main contributions to knowledge and method it is first necessary to reflect back upon points raised in the literature, and also highlight from where this research started.

Thompson (1997 p.65) reported that, according to Ken Hall of Birse PLC while speaking on Partnering at the November 1996 CIMCIG meeting in London, "...the level of trust you require is rarely found in the construction industry". "The whole industry has been tarnished by confrontation, and as we learn about words like integrity and responsibility so we learn to deal with words like trust". One interviewee when talking about trust, says, "I think it's probably a hard word to define in construction. It goes into so many areas" (Thompson 1997 p.65). This led to the point being made that, 'there is little guidance as to what trust really means for the parties involved in construction work' and resulted in the following questions being posed:

- How do we define trust?
- How do we develop trust?
- How do we know when we have got it?
- How do we keep it?
- How important is it anyway?

Since then, Bresnen and Marshall (2000 p.821), in discussing client-contractor collaboration in construction, state, 'construction is insufficiently informed by the many

social science concepts and theories that are central to an understanding of co-operation and trust between organisations'. More recently, Hailstone (2002 p.8) has quoted Howard Lawrence, Director of Projects and Business Improvement at Defence Estates as saying, 'We need to have improved project management skills and we need to remove the adversarial barriers that have always existed. This will need new skill sets because to produce a high performing team you've got to develop trust and the softer skills that surround that'.

Both prior to and during this time researchers have examined trust within the construction industry. Frequently reported in the partnering literature (chapters 2 & 3), only the importance of trust is prescribed, shedding little light on the concerns stated above. Others have taken steps to gain a better understanding in how it works and what influences it in a construction context. Hannah (1991 - see chapter 7) applied Butler's Conditions of Trust Inventory to the relationships that exist between client, architect and constructor. However, this was over 10 years ago and was in a US construction industry context. Wong et al (2000 - see chapter 8) examined antecedents of trust in intra-organisational relationships. However, this was just from the perspective of three Singapore public sector service providers responsible for infrastructure construction projects. Most recently Woodward and Woodward (2001) in a single case study, examined how trust between a project manager and his superior, the company's managing director was allowed to breakdown. But this was from an organisations internal hierarchical perspective, relating to organisational management.

8.2.1 Contribution to Knowledge Made by this Research

At its core, this research has aided understanding of social trust in the inter-organisational relationship that exists between client decision-makers and their

contractors. In doing so, it has taken into consideration the highly complex exchange system that occurs between these parties within the temporary multi-organisation.

- Lack of clear definition and understanding in the issues influencing trust in the UK construction industry, has hindered its development and management. This work therefore lays down a strong foundation to enable others to examine trust in UK construction in more detail.

- From not having previously understood the extent to which the TMO and the complex exchange system experienced in the construction industry have affected trust between clients and contractors, it is now known, that;

  firstly, that third party referents from within the TMO are a dominant influence on client trust.

  Secondly, who the key referents are, and

  thirdly, full use of Butler's Conditions of Trust Inventory (CTI) combined with Reasoned Action, confirms just how complex understanding trust in the UK construction industry is compared to other more straightforward relationships. For instance;

  - Interpersonal and organisational management (Elangovan and Shapiro 1998: Bigley and Pearce 1998; Couch et al 1996; Mayer et al 1995; Shapiro 1987; Meeker 1983; Rotter 1980; Matthews and Shimoff 1979; Bonoma 1976; Zand 1972; Rotter 1971; Kee and Knox 1970; Deutsch 1960).

  - Industrial, automotive or general manufacturing buyer-supplier relationships (Michell et al 1998; Hagen and Choe 1998; Selnes 1998; Nooteboom et al 1997; Kozak and Cohen 1997; Kumar 1996; Morgan and Hunt 1994; Anderson and Weitz 1989; Swan et al 1985; Zand 1972).

  - Retail, finance, educational and other professional service sectors (Michell et al 1998; Selnes 1998; Kumar 1996; Cowles 1996; Ganesan 1994; Morgan and Hunt 1994; Young and Wilkinson 1989).

Unlike other work specifically on trust in the construction industry (Woodward and Woodward 2001; Wong et al 2000; Hannah 1991) these findings (Chapter 7 & Sections 7.1 to 7.2.7.10) have provided a valuable insight into trust from the client perspective and are essential in informing management about areas to concentrate on when developing marketing and management strategy within the construction industry, if co-

operative relationships between client and contractors are to improve (Bresnen and Marshall 2000 p.821).

- Focusing specifically on trust by clients within the UK construction industry, these findings are more relevant and up to date than previous work, and therefore more useful to clients and contractors alike having to operate within the still changing domestic competitive environment in the UK.
- The research concentrated on client-contractor relationships operating within the private sector for new and refurbishment building projects. It is therefore more relevant to those operating in the UK compared to work produced by Wong et al (2000) and Hannah (1991) (Chapter 7 & Section 7.2). This is all the more important given the strong decline in public sector contracts, replaced by the private sector due to privatisation in the 1980's and 90's, and, until recently, cuts in public spending, combined with the growing importance of PFI and PPP arrangements.
- Findings can also help marketing theory and practice outside the building sector. The relevance of these findings may apply to sectors as diverse as civil engineering, shipbuilding, aerospace and aircraft manufacturing, publishing, film, pharmaceuticals, IT, software and systems engineering. And any other industry and sector in which clients require sporadic, bespoke, complex solutions, products and/or services, which involve multiple contributors over an extended exchange period.
- Most significantly, understanding how trust works within the TMO also provides lessons for new generation organisations being formed across different industries (Section 2.1). With new organisational structures like the 'Virtual Corporation' for the most part trust is recognised as being important. The need for sharing information openly is raised (Priess et al 1996 p.144; Goldman et al 1995 p.313). There is emphasis on the importance of customer trust and reputation (Priess et al 1996 p.176) and ability to trust across company lines (Goldman et al 1995 p.67). Also, that

'leadership, motivation and trust replace command and control as the dominant motifs of management (Goldman et al 1995 p.67). Davidow and Malone (1992 p.19 & 21...*etc*) also espouse the importance trust plays in the virtual corporation. Mills (1993 p.52, 255 and 261) emphasises the need to trust others, most notably the employee. However, as with the construction-based literature, there is little to go on regarding these new organisational structures and how to define trust. How it works in the organisational structure. What really influences it? How to develop and keep it. In fact, the RSA Report (1995 p.25) states, 'engaging all supply chain participants in raising performance levels - with the trust-based partnerships this requires - runs counter to our current national culture. Until we free ourselves from adversarialism in business relationships, our supply chains will continue to under perform'.

- Cherns and Bryant's (1984 p.181) 'Temporary Multi-organisation' (TMO) is a forerunner to these new generation organisations. The construction industry is practised at working within the TMO structure, and in the process has learned, and continues to learn many lessons. This research provides important insights into how trust works in the TMO. Most significantly the power, reputation and third party influence, combined with contractor behaviour identified under the CTI has. It also offers something to other industries developing their own TMO's. In short, tomorrow's companies in other industries would do well to learn from TMO's in today's construction industry.

8.2.2 Contribution to Method Made by this Research

The successful application of the combined Reasoned Action Model with Butler's Conditions of Trust Inventory achieves two fundamental contributions to research method:

- **First** is with regard to management research in construction.

- The **second** is to do with the evolution that has taken place in the application of the two chosen models to a new marketing problem.

Application of the two models to a construction management scenario directly addresses the call by Betts and Wood-Harper (1994 p.551), 'for a wider adoption of innovative, emerging management theories to construction'. The work has addressed this call directly with regard problems experienced with marketing management practise in the UK construction industry (see chapter 2).

- Reasoned Action is an established model in disciplines like experimental social psychology, health, politics, economics and education (Einhorn et al 1979; Miniard and Cohen 1981; Ajzen et al 1982; Kristiansen 1986; Shephard and Farleigh 1986; Biddle et al 1987; Charng et al 1988; Ajzen 1991; Towler and Shepherd 1992; East 1993; Currall and Judge 1995; Chang 1998). Its successful application to marketing related problems is relatively more recent (Sheppard et al 1988; Sparks and Shepherd 1992; East 1992; Thompson et al 1994; Thompson and Thompson 1996). Therefore, its use in a construction marketing and management problems contributes to its evolutionary development into the eclectic marketing discipline.
- In addition, due to its special interest in trust between clients and contractors, it tackles directly the point made by Bresnen and Marshall (2000 p.821) (Section 7.2), that construction is insufficiently informed by social science concepts and theories.
- Butler's (1991) 'Conditions of Trust Inventory', is new compared to Reasoned Action. However, due to having been tried and testing in the US construction industry (Hannah, 1991), and having made a successful transition from Human Resource Management to Marketing disciplines (Fletcher and Peters 1997), its application to a construction marketing management problem in the UK places it at the forefront in its methodological evolution, whilst once again tackling directly

points made above by Betts and Wood-Harper (1994 p.551) and Bresnen and Marshall (2000 p.821).

- Finally, this is the first time that the Reasoned Action Model and Conditions of Trust Inventory (CTI) have been combined into a single multi-methodological model. The need to address clients' own, 'Past Experience' required the basic Reasoned Action Model to be modified. Past behaviour (experience) has previously been included with 'Reasoned Action' (Eagly, 1991 p.178; Currall and Judge, 1995 p.153). However, a complex multi-attribute model was needed to match the complex exchange process that is experienced between client and contractor, if findings were to reflect clients' experience of contractors' complex past behaviour and its affect on trust. The Conditions of Trust Inventory, designed to assess perceptions of others' behaviour and its affect on trust, fulfilled this objective.

8.3 Implications for Construction Marketing Management

Kelemen and Bansal (2002 p.106) state, 'Because the research problem is defined by the context of its application, the knowledge produced has a fairly narrow application'. In presenting implications for practitioners of construction marketing management, they are limited to the parameters set by the focus of this research and its related findings. In this sense implications for management practices are restricted. In making these recommendations, findings from this study have to be linked with already established principles of relationship and projects marketing. In addition new questions will arise. This lays a foundation for future research covered in more detail later (Section 8.5).

- In developing client trust, contractors need to address policy internally and externally to their organisation. Internally, they will need to examine carefully their communications culture for effective teamwork and client orientation. It is not enough for individuals or a small team to concentrate on trust building. All levels of

the organisation from senior managers and directors down to site management must participate. Externally, they need to examine past performance and current reputation in relation to client and key referent past experience and current perceptions. These feed directly into a client's current expectations, confidence and ideas about a contractor's future trustworthiness. Thought needs to be given to the relationships the contractor currently has with each of the key referent groups identified in this study. This all needs to be linked to contractors' behavioural characteristics identified in the conditions of trust.

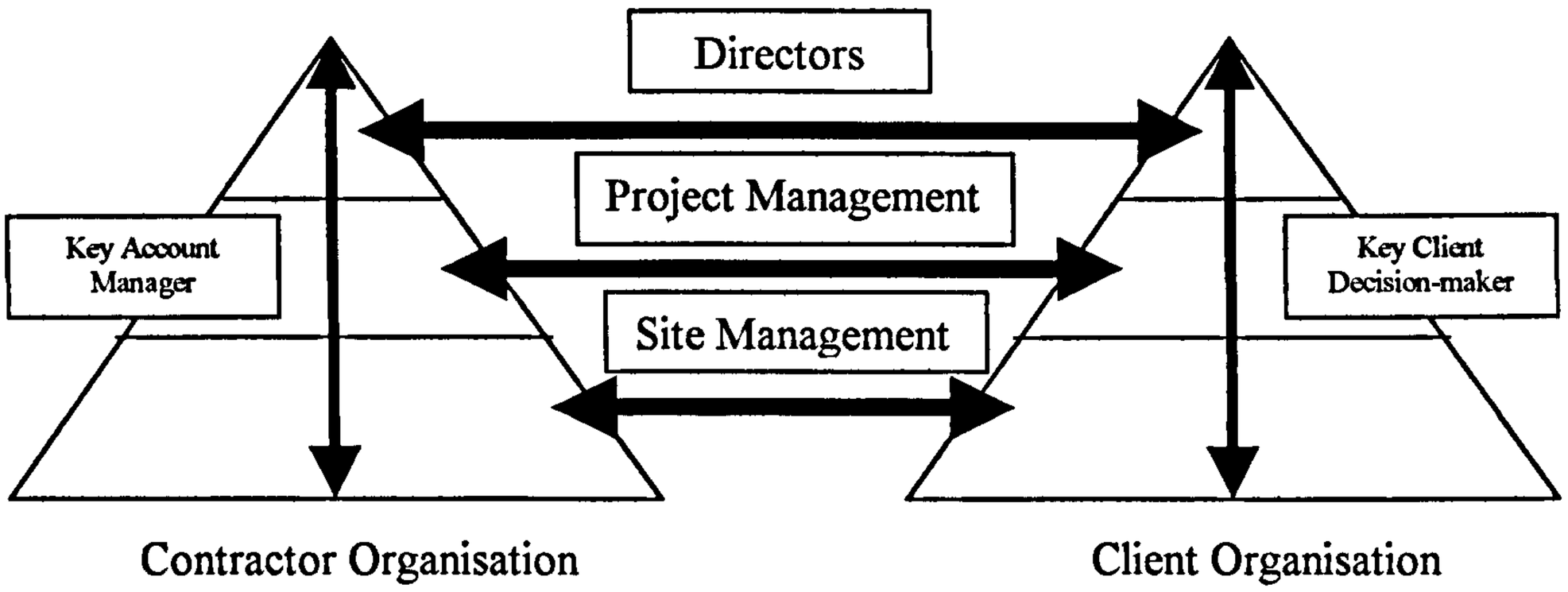
- Pearce (1992 p.10-11) states, 'Corporate strategy and marketing strategy are inseparable'. 'Marketing is not done solely by the marketing department'. Nowhere is this more true than where the contractor organisation wants to develop client trust. Everybody within the contractor organisation needs to be on board. Trust cannot grow between the client and contractor if its development is simply viewed as a product of mere tactical manoeuvring for short-term competitive gain.
- This study confirms Preece's (1998 p.12) assertion regarding good stakeholder relationships that, 'it takes a great deal of time to build trust and good relationships, but a very short time to break them'. This study indicates that client organisations recognising the importance of trust are taking tentative steps toward seeing how reasonable and beneficial it is within the current environment. Contractors need to work hard at reassuring those clients who are taking this seriously. Developing confidence-based trust will take time and care must be taken.

- Trust must be developed from a strategic stance, and a number of issues need to be considered in its development. A portfolio analysis of past and present clients needs to be undertaken to determining which client relationships are most important to the contractor's future. In addition, those clients who are not pre-disposed to developing

trust need to be identified and managed differently. Most likely on a project-by-project basis, and certainly not at the expense of those clients deemed most important to the contractor organisation. Another major consideration is the need to understand the contractor perspective of clients, and determine contractor attitudes, beliefs and aspects of client behaviour affecting willingness to trust (Section 8.5).

- Next, the findings show that client decision-maker trust is influenced through a multiple network of colleagues within the client organisation (Section 7.2.5.2). Similar to the buying centre, this might be referred to as the trust centre in the client organisation. The contractor organisation will need to consider which client organisations it can align itself to in order to develop lines of communication between the multiple members of the trust centre, and the opposite employees within the contractor organisation. This is particularly important where both client and contractor see themselves working together on a number of projects in future, such as with Strategic Partnering. The purpose being to develop important matching hierarchies between organisations (Figure 8.1 below) as prescribed by Dahlgren and Söderlund (1993 p.13), for the purpose of improved project performance, but for trust building in this case.

Figure 8.1: Matching Hierarchies



- In addition for this to work agreement has to be reached with potential client organisations and recognised as a mutually agreed long-term objective. Problems will arise where the organisations are culturally incompatible, and where employees in one or both organisations are unsympathetic to the cause. This is especially important where the appointment of architects and sub-contractors are concerned. Both of these referent groups need to be selected on the basis of having good communication skills and the right attitude for this task. Also, both client and contractor organisations need to appoint champions responsible for driving the co-operative process between organisations. A Key Account Manager (KAM) on the contractor side, and a Key Client Decision-maker (KCDM) on the client side. Both organisations may be faced with the need to recruit, train and lead employees in these developments from the top, making it part of the mission of the organisation to strive toward.

- This study demonstrates how crucial communication is. Not only between client, architect and contractor, but within the contractor's own organisation. Teamwork and communication must be improved otherwise they run the risk of failing to achieve many aspects identified by the conditions of trust inventory (Sections 7.2.7 to 7.2.7.10).
- Another implication is the importance identified in managing relationships better with the CDM's other referent groups namely, architects, sub-contractors and past clients. This needs to be supported by a programme of research to keep tabs on current perceptions of the contractor organisation, its reputation and expectations held by these groups (Section 8.5). The contractor organisation must also monitor those expectations, and ensure that strategies are put in place to either achieve those expectations, or educate the groups where expectations are inaccurate or unreasonable. Relationships with sub-contractors are vital for building trust. These

relationships need to reflect what clients are being told by the main contractor. Failure to address their needs risks undermining attempts by the contractor to achieve issues identified by the CTI.

8.3.1 Implications of Findings in Relation to the 7P's of Services Marketing

Product: Essentially the design for the end product, a building, as stated earlier (accept for Design and Build projects) is still under the control of client and architect (see section 2.2.1). However, in terms of the service augmentation contractors can offer surrounding the actual construction of a building, a number of areas have been identified in this research which manifest themselves through other elements within the 7P's of the services marketing mix.

Place: The research did not deal with location of projects as decided once again by clients and their architects, where 'Place' in terms of the final physical building is concerned. This clearly still remains beyond the control of the contractor.

- However, findings in relation to service activities surrounding a project demonstrate the great importance placed in availability of somebody in the contractors firm should problems or questions arise. And similarly in that contractors should be available when the client needs work doing. These findings on the one hand strongly support Berry's (1987) assertion for the need of a 'Quick Response Facility' to problems and complaints when they arise. On the other hand they also support, Parasuraman et al's (1985) 'Accessibility Criteria' (Section 2.2.1), about being convenient, available and not keeping the client waiting.

Price: Any augmentation of the core product offering (in this case the construction of a building within time, budget and to specification) through service offering, deemed important by the client, adds value.

- Once again, price is for the most part decided based on a client's budget and not strictly by the contractor. However, if the contractor can develop a positive reputation in relation to the conditions of trust identified as being important in this research for developing client decision-maker trust, this can provide the contractor with the possibility of a better value added proposition over competitors.
- Depending on which clients the contractor is dealing with, issues such as openness, discretion and integrity can lead to possibly reducing costs unnecessarily incurred on

projects in the past. Cost, which ultimately would only add to the price of a project anyway. For example, reducing the propensity to add a risk premium or to be claims conscious.

- This may also act partially toward suppressing the 'lowest price wins' scenario in favour of a more value added relationship in the longer term.

Promotion: Good communication has been identified as crucial to developing trust:

- Contractor effort must continue in building a positive reputation within the industry (Table 2.4 – Chapter 2), as it has now been shown that third party referent word of mouth in the form of reputation (a valuable marketing communications medium) goes beyond simply helping clients shortlist and award contracts to contractors, but also plays an important part in developing or undermining trust.
- Contractors need to be more open about project developments and pricing, and be prepared to disclose vital, timely information in order to avoid problems building up.
- Advertising and sales related communication, need to be carefully designed and vetted to ensure unreasonable client expectations are not being raised. As a failure to deliver on expectations/promises made will undermine trust.
- In support of the above point, greater care must be taken in terms of internal communication between the sales negotiation and site teams where handing over responsibility is concerned once a contract has been won. This also ties in with client expectations and promise-fulfilment.
- Lastly, key referents said to influence client trust toward the contractor, have now been identified (Sections 7.2.4, 7.2.5 & 8.1.3). Marketing communications strategy should be developed, to support relationships with these groups.

People: As stated earlier (Section 2.2.1), a firm's personnel occupy a key position in influencing customer perception of its products (services).

- The Conditions of Trust Inventory (CTI – Sections 6.4.1, 7.2.6, 7.2.7 & 8.1.1) has successfully identified a number of areas in contractor behaviour that effect client trust. As Jobber (1995 p.679-80) highlights training of employees is required to ensure they have a good appreciation of the appropriate forms of behaviour in line with the CTI findings.
- Also with this knowledge firms having trained their staff can set standards and monitor performance. As without this employees will tend to provide variable levels of performance, thus undermining the crucial area of consistency where developing trust is concerned (Tables 6.8 & 6.9 – Chapter 6).
- The contractor must recruit high quality staff able to appreciate the importance of developing trust. As Ford (1993 p.272) states (section 7.2.5.2), 'a relationship must ultimately depend upon the interaction of the individuals who participate'. Therefore, as Berry (1987) tells us, once hired treat these staff well and communicate with them clearly as they are delivering the service that ultimately can aid or hinder the development of trust.

Process: This is by far the most important element within the 7P's of services marketing for developing trust. A number of findings complement the work of Berry (1987) and his guidelines surrounding success in services marketing.

- As section 8.3 above on implications for construction marketing management shows, marketing efforts must be directed at all levels of the organisation from directors down to service providers (See Figure 8.1), thus supporting Berry's (1987) notion of marketing from all levels of the service providers organisation, not only in the interests of service quality but in developing client trust.
- Receptivity (section 7.2.7.10) supports the idea of Berry's (1987) 'Responsiveness'. The contractor must possess the ability to listen, and understand the ideas and demands of the client. Then customise its services to that client.

The next two points relate to 'Availability' (Section7.2.7.1), 'Loyalty' (Section 7.2.7.7) and 'Receptiveness' (Section 7.2.7.10)

- To develop trust, continue to market to existing clients, being available when required, and loyal to their needs first over less regular clients.
- Set up a 'Quick Response Facility' to deal with clients' questions, problems and complaints.

All of these activities should be combined with the promotional element of the marketing mix to aid development of a strong positive brand identity for good service and trustworthiness, in order for the contractor to differentiate it self from others (e.g. Jarvis) in the minds of clients.

Findings also show that a number of Parasuraman et al's (1988) criteria for evaluating service encounters (Section 2.2.1) also play an important part in the development of trust;

Butler's (1991) CTI Categories	**Parasuraman et al's (1988) Evaluation Criteria**
Availability	Access
Consistency	Reliability
Receptiveness	Responsiveness
Competence	Competence
Openness & Discretion	Communication

Physical Evidence (Proactive Personalised Service): Lastly, these research findings support the notion, that contractors' need to be aware that where trust is important to the client, they are looking for supporting evidence of a contractor's true intention to be trustworthy. This is mainly through third party referent opinions and clients own past experience. In this they may well also be looking for tangible evidence. Whilst this research has not been directed at determining the nature of tangible physical evidence in services marketing, the following is a strong possibility:

- They will take into consideration previous clients and the quality of finish on previous projects
- Whilst looking to sub-contractors' for confirmation, in the way they are treated and how safe the site is, they will also, more than likely, look to see how well the contractor and his sub-contractors present themselves at site meetings, both in terms of appearance and behaviour.
- Contractors should also ensure that employees have access to up to date technology, not only in terms of design, scheduling and logistics management but most importantly in relation to communications and allowing the client to contact someone responsible at anytime (See Section 7.2.7.1).

8.4 A Critique on Aims, Research Methodology and Analysis

Having decided client trust toward contractors was the main focus for this thesis (Chapter 2), literature was sought to better understand trust (Chapter 3). In this, defining characteristics of trust were found to be 'Confidence' (Section 3.1.2), 'Cognisance of Risk' (Section 3.1.1) and 'Willingness to Act' or 'Behaviour' under conditions of uncertainty (Section 3.1.3). In addition, the literature revealed Ali's (1994) four key factors that affect buyer confidence. They are as follows;

- Clients' personal assumptions **(clients' own beliefs and attitudes).**
- Past experience of others **(reputation).**
- Opinions held by others whom the buyer respects **(advocacy and the word of mouth transfer of reputation noted above).**
- Clients' own past experience **(of the key third party for whom confidence is tested, that has had personal past experience of the service provider).**

These four factors formed an early basis for the aims of this research. What was then required was a further search for any frameworks or models that would allow for a

logical and systematic approach toward addressing these factors in accordance with clients' perspective of contractors (Section 3.3). On discovering both the 'Reasoned Action Model' and 'Conditions of Trust Inventory', it was possible to link parts of the combined models to most of Ali's four factors.

Issues of Importance Related to Models for Statistical Results (Table 7.1 – Chapter 7)

Ali's Issues for Consideration	**Model**	**Elements**
1. Personal Assumptions	Attitude Toward the Act (***Attitudinal*** Expectations Element in Model)	(Aact)
2. Past Experience of Others **3.** Opinions Held by Others Whom Clients Respects	Subjective Norm (***Normative*** Influence Element in the Model)	(SN)
4. Client Own Past Experience	Butlers Conditions of Trust Inventory (***Experience*** Element in Model).	(PE)

However, the combination of the models represented a large project and so, the aims of the research were restricted to those outlined in Section 1.3 (Chapter 1) and Table 5.1 (Chapter 5):

1. Understand behavioural *conditions of trust* expected by the client from a contractor throughout the life of a project.
2. Understand behavioural intention toward trusting that contractor in future projects taking into consideration the effect of;
   (i) the client decision-maker's past experience of a contractor's behaviour,
   (ii) the client decision-maker's own attitudes and beliefs about the likely outcomes of trusting the contractor in future,
   (iii) the influence on CDM's of normative expectations from key referents (such as architects).

This restricted understanding of the affect third parties had, and what their experience had been, to simply identifying who they were and the degree of influence they had. To go further than this would have required, in addition to work already done further research along the lines of Hannah (1991) who examined conditions of trust from the constructor, architect and client perspectives simultaneously in the US construction industry. This might be viewed as a limitation of the work reported here. It certainly flags up an opportunity for future research by others (See Section 8.6).

Nevertheless, the two models when combined allowed for Referent Influence, Personal Assumptions and an examination of Clients' Past Experience of the contractors in terms of contractors' previous behaviour as service providers.

Execution of the research models in the field required both, qualitative depth interviews and a quantitative questionnaire survey. Analysis for these, was carried out in accordance with prescribed requirements (Assumptions – Section 5.6). Given that semi-structured depth-interviews had been carefully designed, and that categories were already defined, a simple elicitation process could be followed, it was decided that a simple tallying process was all that was needed and that therefore interviews should not be transcribed. It was felt this would be unnecessarily time consuming, as all interviews were recorded for accuracy, and that notes were taken every time points were elicited from the interview tapes anyway (Section 8.4.6).

With regards to the quantitative data analysis, for the most part this revealed satisfactory to strong results or as with the 'Conditions of Trust Inventory', some very strong results. Less satisfying were 'Consequential Belief' results in the 'Attitudinal' part of the 'Reasoned Action Model' (Table 6.5 & Figure 6.5 – Chapter 6). Whilst Attitude (Aact) in relation to Behavioural Intention (BI) proved satisfactory, results between Beliefs (b.e) and Attitude (Aact) fell below acceptable assumption levels for reliable correlations (Assumptions, Section 5.6 – Chapter 5). At first sight, this suggests that Consequential Beliefs identified for this study were inappropriate, and that future research seek a more reliable set of criteria. This is indeed possible, however, it could also be presumptuous. As the analysis and discussion show, it is possible that these low scores are merely indicative of clients' caution when it comes to deciding clearly what the consequences of trusting a contractor are. Given that attitudinal findings were found to be strongly in

favour of trust in terms of importance, being reasonable and beneficial, this suggests results relating to beliefs simply show clients to be less sure about the real consequences. This may be due to the relative recency of interest in the subject of trust and that clients have not had to concern themselves with it previously, being able to fall back on contracts, conflict and litigation. Alternatively, that whilst results were weak, they maintained a pattern of positive correlation with positive consequences and negative correlations with negative consequences and that this indicates indecision on the part of clients who are simply erring on the side of giving contractors the benefit of the doubt, whilst experimenting with trust toward them. The following section looks at some additional limitations to this research study.

8.5 Limitations of the Study

McGrath, Martin and Kulka (1982 in Brennen 1998 p.269) are noted making it clear that an important part of research design is compromise. Brennen (1998 p.269) states, 'there are many trade-offs to be made in research design', for example, 'between breadth and depth, expediency and rigour, time and completeness'. This section outlines a number of decisions that had to be made in the design of this study.

8.5.1 Using Only Client Perspective

It is generally considered that for relationships to succeed they must be interactive and not simply one-way. However, in this study it was decided only the client perspective would be investigated. Two points influenced this decision: First, it is generally acknowledged that success in marketing depends first and foremost on understanding customers. In deed, Latham (1994 p.3) stated, the client is the driving force and 'implementation begins with clients'. Determining others parties perspective would be better served by starting with the client, and then address other parties identified in this study as being important in future research. Secondly, was the sheer complexity of this

task. In complying with Ali's (1994 p.119) principles for determining client confidence, the two models used resulted in a large, complex exercise considered enough for one project. The combination of these two factors resulted in the decision to only take the client perspective for this research.

8.5.2 Respondents' Experience

For the purpose of this project it was essential to understand a CDM's past experience of a particular contractor and then have them reflect on that contractor in terms of future intention. However, Frankfort-Nachmais and Nachmais (1996 p.206) state, 'memory distortion, due to passage of time, selectivity, and the affects of an often artificial setting can significantly affect the quality of data'. Given the complexity of construction projects, and sometimes the amount of time that passes between them, the respondent was therefore asked to think about the last building contractor who had worked for them. The problem here is in guaranteeing the amount of experience the client decision-maker will have had with the most recent contractor. There is no easy answer to this, and in order to maintain consistency in what was required of respondents, and to capture the most recent possible memory, this choice was made.

8.5.3 Staying with the Established Condition of Trust Categories

Hannah (1991 p.5) states, 'Due to the use of the multi-dimensional concept and the statistical validation of the scale, the CTI was the measurement tool chosen for use in investigating trust in the construction industry (United States)'. Likewise, in this study the established CTI categories were utilised within the UK construction industry. However, this meant that in attempting to understand conditions of trust expected from contractors in the UK, this study was limited to those categories already prescribed in the CTI. Given the complexity of the exchange relationship between clients and contractors and the differences almost certain to exist between this scenario compared to Butler's

(1991) original area of investigation, the argument for the need to develop a bespoke set of condition categories relating to this study might be made. However, attempting to create a new set of condition categories specifically for the UK construction industry would have been a large task, and a project in itself. Given the complexity of the investigation already defined, and the need to blend CTI with Reasoned Action, the project was complex enough already. Hannah goes on to state, 'Since Butler's original scales were generic in orientation to the respondent, the instruction that accompanied the scale for this study were modified to fit the specific situation of a construction project'. Whilst Fletcher and Peters (1997 p.529) explained how certain categories within the Conditions of Trust Inventory (CTI), 'were not utilised as the specific questions used were *felt* by the authors to be inappropriate' for the medium they were investigating'. No further information was available as to how adaptations were justified or validated. It was therefore decided that in this study Butler's existing set of condition categories would go through the depth-interview process at the same time as the Reason Action Model (chapter 5). This went further than previous studies in validating Butler's Condition of Trust, by having respondents relate their own positive and negative experiences to each category heading. This provided the study with a bespoke set of criteria and language within each category tailored to the needs of this study.

8.5.4 Population Sample Frame

Fern and Brown (1984 p.68) reflect on the work of marketing scholars investigating Industrial Marketing. One of the key dichotomies to be identified when comparing consumer markets with industrial markets is the number of buyers (p.70). As described in chapter six, pulling together a large enough population sample frame was a difficult, time consuming exercise. However, with construction falling well within the realms of Industrial Marketing, a population sample frame of 590 companies is not unreasonable,

when in addition to being industrial in nature, those companies that were included within the population had to fall within certain criteria to qualify. With alternative methodologies such as observation or case studies, this would not have been a problem. However, as Dillon et al (1990 p.152) highlight, qualitative research methods involve small numbers of respondents but only provide descriptive information not easily projected to the whole population. In order to arrive at findings, which could be projected to the whole population of clients and contractors working within the large private building sector of the UK construction industry, a quantitative study was being executed (Dillon et al 1990 p.152). This required the development of the population sample frame.

8.5.5 Response Rate

Out of 590 questionnaires that went out with reply-pay envelopes, a promise of anonymity and a follow-up questionnaire for non-responders (Jobber and O'Reilly 1996 p.32), a total of 124 (21 percent response rate) of useable questionnaires were returned. It might be argued that this is a low response rate. However, Dillon et al (1990 p.201) show that for 'Direct Cold Mailings' response rates in general can be as low as 10 percent. Whilst Jobber and O'Reilly (1996 p.30) reported on industrial mail survey response rates as low as 14 percent from Industrial Safety Engineers, and even 5 percent from Design Engineers. Some mail surveys response rates can be higher. However, it tends to be in those cases where there was an established mail panel of respondents, a pool of respondents who are ready to participate in research projects and ready to answer questions whenever they are asked to do so. On the other hand Thompson (1984 reported in Jobber 1996 p.31) talked about response rates of only 23 percent from Business Executives rising to 35 percent where free gifts (such as a pen) were used as an incentive. This study used an industrial mail survey to 590 prospective respondents

without prior knowledge of the survey (cold mail survey). It was sent to chief executives and senior management, who were asked to forward the questionnaire on to those chiefly responsible for the procurement of building contractors' services, thereby acting as gatekeepers. The response rate is therefore found to be good compared to Peter's and Fletcher's (1997 p.528-29) response rate of 23 percent out of a sample of 500 in their CTI study, which had been a consumer survey. In any case the response rate was strong given the nature of this industry in terms of the number of key clients within this significant market segment according to type and size of project.

8.5.6 Decision Not to Transcribe Interviews

Analysis of qualitative data can be a complex activity where advanced methods are being used. Strauss and Corbin (1990 p.81) refer to a procedure that starts with scanning documents for words, phrases and sentences that strike you as significant, important or of interest. By definition this would require a transcript where interviews have been carried out. However, they are addressing the process of developing categories in terms of their properties and dimensions (p.69). Yin (1994 p.102-3), in describing analysis procedures of case study evidence, refers to creating category matrices, flowcharts or frequency tabulations. In this study, the purpose of the qualitative depth interviews was straightforward, and executed carefully within already established, clearly defined parameters, inline with prescribed methods (East 1997 p.114; East 1993 p.72; Ajzen and Fishbien 1980 p.62 *ff*; Tuck 1976 p.77) for eliciting salient common sense statements in response to a series of carefully defined constructs and questions. Interviews were semi-structured. Whilst respondents were able to speak freely, they were directed by the interviewer's need for specific information to be used in a survey later. Therefore, only content analysis, involving tallying of answers given by respondents was needed. It was decided that the interviews would be tape recorded to ensure accuracy of data capture.

Then rather than writing up the interviews, analysis could be done by listening to the interviews and eliciting items as they arose. Elicitation was captured through a tallying process.

8.5.7 Industry Developments Since Data Capture

The industry is very much aware of the problems that it faces over adversarial working relationships between construction project partners, and while this research was in progress, continuing attempts have been made to address the issue, most notably through the work of Egan (1998) Chairman of the Strategic Forum for Construction. The most important development has been the introduction of a standard form of partnering contract PPC2000, described by its author, David Mosey, as designed to avoid the fear of rigid/irrelevant forms and to underpin trust and co-operation through Project Partnering (Movement for Innovation, 2001). To this end it is interesting to note that within the PPC2000 Contract it is stated that 'Partnering team members should work together and individually in the spirit of trust, fairness and mutual cooperation'. This combined with provisions within the contract for providing transparent and cooperative exchange of information, improved methods of communication, participation in meetings and decisions, response to changes required by the clients and clear provision for agreeing costs for alterations, supports a number of findings found in this research. Follow-up studies have indicated that PPC2000 is having some success (Egan, 2002). However, Egan (2002 p.33-34) went on to point out that action in and by the construction industry to raise standards of performance to help achieve the vision set out in his report 'Accelerating Change' was still needed. One such area to be addressed was in how partners within supply chains behave toward one another, where developing the relationship of trust underpins successful integrated teams. This suggests that provision within PPC2000 is not fully delivering what is required if client trust is to develop. In

deed, practitioners and industry commentators remain cynical, continuing to report widespread and endemic adversarial relationships between all parties involved in construction projects (Harding, 2000; Madine, 2001; Harding 2002; Critchlow, 2002; Anon. 2002; Blackler, 2002; Klein, 2002; Stitt, 2002; Fletcher, 2003; Chaterjee, 2003). In this environment Helmsley (Director of Consulting at Cryril Sweett) observed that, '*advising that something has become a dispute is seen by many not as a way of starting to resolve a problem, but as an admission of defeat, if not a sure-fire way of losing a client'*. Therefore, he points out, the most sophisticated dispute resolution procedures will achieve nothing without a culture based upon collaboration and teamwork, '*which takes - 'faith and commitment'* (Hemsley, 2001). In other words, you cannot legislate trust, and you cannot achieve co-operation without it. As stated earlier (Section 7.2.7.2) under 'Competence' developing trust has more to do with the need for new skills if it is to be developed (Hailstone, 2002b). However, for this to happen client-contractor collaboration needs to be better underpinned with appropriate social science concepts and theories to aid understanding of cooperation and trust (Bresnen and Marshall 2000b p.821). Findings in this research show that clients within the building sector are beginning to appreciate the benefits of trust. However this is not an industry wide situation. Lynch (2003 p.18) in reference to the Civil Engineering sector, highlights Mowlem's Chief John Fraser's scepticism over new methods of procurement, quoting him as also saying, 'the client culture of don't trust the contractor has to change'. Findings from this research provide a much deeper insight into what trust is and how it must be developed than is already available. In addition, as the next section shows, these methods, shown to work within construction marketing through this research, now provide possible opportunities to further develop that understanding throughout the entire construction industry.

8.6 Recommendations for Future Research

The UK construction industry is facing many challenges. Growing interest in partnering and improvements to client-contractor relationships, increased threat of international competition and calls for greater effort in developing better teamwork and competitiveness (Egan 1998; Latham 1994) means there is a growing interest in the need to understanding and develop trust. However, due recent interest in this field, combined with the lack of appropriate tools to help researchers address this topic within the construction discipline, progress has been slow. This study has contributed to this body of work by providing insight into how trust works within the industry, and by adapting tried and tested models and constructs from outside the construction discipline to the needs of this industry. This provides a foundation for further research in this field. New opportunities now present themselves to further the work.

- Firstly, it should be recognised that successful relationships are a two way process. As such, work should be done from both the contractor and client perspective. Given the already complex nature of the project only the client perspective was investigated. However, the study can now be repeated from the contractor perspective, in order to gain understanding of contractors' problems and perceived risks, given growing expectations being placed upon them. It would provide insights into the affect that client behaviour has on contractors' trust, attitudes and beliefs and the referent pressures they face within the TMO. This could be executed in a similar way, using depth interviews and a survey approach.
- Another possibility arises from the knowledge now gained about the affect that referent influence has on the client decision-making process and, more importantly, who the key referents are. Research can now be carried out to determine what each referent group's own perspectives of contractor trustworthiness are. Originally

unrealistic, as it was not known how important they were, there is now a justifiable need to carry out similar studies for Architects and Sub-contractors.

- Another approach could be through the use of more advanced qualitative research methods. Key projects could be picked from which it would be possible to identify matched pairs of clients and contractors working with one another. Using the constructs validated in this study, exemplar case studies could be developed which illustrate not only how client and contractor trust is developed, or undermined, but also provide valuable insight into the nature of the interaction between all parties involved in this exchange process.
- In some instances, such as with strategic partnering, it may be possible to undertake longitudinal studies following the progress of lessons learned between parties over time, across a series of related projects.
- In addition to these ideas, as suggested in earlier sections, the opportunity exists for research to move divergent directions. As well as examining trust from purely within the private building sector of the UK construction industry, the same methodologies can be used in other areas such as the public sector and government contracts for the ministries of defence, education and health, or Civil (Infrastructure) Engineering.
- Focus could be narrowed to just partnering, PFI arrangements or social housing through housing associations. Where a case study approach is taken, the focus could become even tighter, such as understanding and developing trust in partnering arrangements between contractors like Laing Partnership Housing and Local Housing Associations, or PFI arrangements with contractors like 'New Hospitals' (Taylor Woodrow) and health service providers.
- Research might even be done from the international client perspective in order to build British contractor competitiveness for overseas contracts.

- The process of adapting the methodologies used in this study could be executed in other industries, as diverse as shipbuilding, aerospace and aircraft manufacturing, film, pharmaceuticals, IT, software and systems engineering.

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APPENDICES

Glossary of Terms APPENDIX A

Advocate: 'Customer referrals, endorsements and spreading the word'. 'Customers become advocates when they are totally satisfied with a company's products or services' (Peck et al 1999 p.224). These operate in referral markets through word-of-mouth (see below).

Building Project: Broadly speaking the construction industry may be divided into two sectors: 'Building' and 'Civil Engineering'. However, the **Standard Industrial Classification (SIC)** system breaks the construction industry down into five main categories:

5000 - General Construction and Demolition Work
5010 - Construction and the Repair of Buildings
5020 - Civil Engineering
5030 - Installation of Fixtures and Fittings
5040 - Building Completion Work (Source: Key Note 1994 p. 7)

Although a building project from conception to completion occurs through the output from more than one of these categories. In addition, analysis of building projects (according to plans approved) shows a sector divided into a number of different types of building project:

- Residential
- Industrial
- Commercial
- Hospitals
- Schools
- Sports (Source: Glenigan Ltd reported in Key Note 1992 p.3)

As stated in the introduction (Chapter One), this project focuses on the experienced private building sector of the UK Construction Industry. Special emphasis is placed on those clients who have an on-going interest in the industrial or commercial building sector. This does not include, residential and housing projects, defence, HRM prisons, police, hospitals, medical service providers, schools or other educational service providers in either the public or private sectors.

It does include those private sector clients with new build and refurbishment interests in offices, retail and distribution, hotels and leisure activities, and property developers with related commercial interests. At the same time reference to a building project includes all parties responsible for that project from conception to handing over and final accounts.

Conditions of Trust: Based on the definition of trust stated below, what aspects of the contractor's behaviour, helps develop or undermine a client's trust in them. Butler (1991) developed a detailed inventory of trust conditions to reflect different aspects of behaviour and the affect these have on ones trust toward someone. This was utilised in this research.

Expectations: Based on the term 'Expect', defined as 'look forward to, regard as likely, assume as future event'. Expectation is, 'awaiting; anticipation; thing expected' (Concise Oxford Dictionary). Brassington and Pettitt (2003) whilst reflecting on marketing channels and logistics state, 'different channel members may have different expectations about what should happen in the future' (p496). Where conflict arises, derived from differences in expectations, 'The response to conflict can even worsen the situation' (p.496). In this research, clients may have developed expectations about contractors likely performance on future projects based on reputation or even their own past experience. Expectations about how the contractor is likely to behave and the level of performance they can expect from them. It is therefore important to understand these expectations, if the likelihood of conflict is to be reduced and more so trust is to be allowed to develop.

Industrial Marketing and Purchasing Group (IMP): Over the past 25 years members of the Industrial Marketing and Purchasing Group have researched and written about many aspects of managing business relationships. Seeking to understand more clearly the dynamics of business markets, which operate quite differently from that of consumer

markets. Separate from the emerging ideas of relationship marketing, which still places heavy emphasis on consumer markets, IMP have developed ideas on how companies interact with one another. How all firms are locked into complex networks of relationships with suppliers, customers and other business partners. And how these different types of relationships can be managed better in order to achieve competitive success. (Also see Traditional Marketing and Relationship Marketing).

Interactive: 'Relationships have always mattered in business markets when the interaction between a customer and a supplier (in this case contractors construction services) has economic consequences that go beyond the simple transfer of products for money in a single transaction (Ford et al 1998 p.65-66). In IMP marketing terms, these types of single transactions are regarded more as 'Episodes' characterised by being simple individual exchanges between two parties. They may take the form of product or service exchanges, information, financial or social exchanges. However, set in the context of an on-going relationship each of these are just single episodes (Ford 1993 p.12). Ford et al (1998 p.7) tell us, 'to understand fully what happens between companies we need to know about all the individual episodes that occur between them. Together all these episodes make up a relationship'. In addition, 'each episode is affected by what has happened before in that relationship and will affect what happens in the future'. Therefore, in the case of the exchange relationship or transaction that occurs between clients and contractors, this takes place over an extended period and is made up of a large number of diverse and regular episodes. It is therefore far more complex than a simple transaction as experienced in consumer markets. Whether directly or indirectly (through the architect or QS), it is a long-term complex exchange process. Simply it is interactive. (Also see Networks).

Marketing Mix: This is formed from the basic elements known as the Four P's: Product, Place (or Distribution), Price and Promotion. Also called the controllable variables of marketing, because, they can be controlled by the Marketer (Hollensen 2003 p.763).

Networks: 'The substance of a relationship can also have another effect: it can bind different relationships together. Because no relationship exists in isolation

Paradigm: Shared way of thinking, or meta-theory that provides a framework for theory (Hollensen 2003 p.766). (Also see Industrial Marketing and Purchasing, Relationship Marketing and Traditional Marketing).

Past Experience: Ali (1994 p.119) highlights the importance of individuals and other peoples past experiences of professional service providers as one of three criteria for understanding client confidence in that service provider. This research focuses on large experienced private sector clients in the building sector, and therefore, where a client decision-maker may be looking to find a contractor for a project, then both their own past experience and the experience of others regarding a particular contractor may present certain expectations about the likely behaviour of that contractor on future projects. (See also Advocate, Expectations, Referee, Referral Market, Reputation, and Word of Mouth)

Perceived Risk: A customer's uncertainty about the consequences of their purchase decisions; their perception that a product, service or professional service provider may not do what it is expected to do (Hollensen 2003). (Also see Expectations, Reputation and Trust).

Performance: Relating to contractor performance. In much of the marketing and management in construction literature, the idea of contractor performance is often limited to fulfilment of expectations raised subject to contract with regard time, cost and quality issues. However, in this research if positive on-going relationships are going to be able to develop, understanding of contractor performance must go beyond this narrow definition. This research focuses on trust, and in doing so is interested in understanding how contractor behaviour acts toward either developing or undermining client confidence in them throughout a project. To this end Butler's conditions of trust inventory has been utilised and it is contractors' performance as perceived by client decision-makers in relation to the trust categories that is important.

Relationship Marketing (RM): Generally accepted as representing the evolution of a new marketing paradigm (Aijo, 1996 p.13; Grönroos, 1994 p.4), the literature offers many definitions of RM. Harker (1999 p.13) gives two reasons for these differences (1) RM has had a relatively short time in which to develop into a fully formed paradigm, and (2) contributors to the development of RM are extremely varied. However, through all of this it is recognised that marketing management must move away from short-term transaction-orientated goals with continually changing customers and adopt more long-term relationship building goals with existing customers (Kotler 1992 p.1). Grönroos (1990 a p.3) defined the goal of Relationship Marketing as, 'to establish, maintain and enhance relationships with customers and other parties at a profit so that the objectives of the parties involved are met'. Later on (Grönroos, 1994) he discussed the merits of many contemporary theories in marketing such as interaction, networks and industrial marketing (p.7), services marketing (p.8), and trust (p.9), deeming these all of these to be offering something in the evolutionary development of RM. Clearly relationships mean different things to different people and to this end any definition of relationship marketing must take into consideration circumstances surrounding party's involved in any given industry sector and its respective markets. Gummesson (1996 p.33) in examining the synthesis between RM and imaginary organisations believed that relationship marketing is marketing seen as relationships, networks and interaction. With the importance played by TMO's (defined below) in the construction industry (the industry's own version of the imaginary organisation) the principles being proposed here must also play an important part in developing relationship marketing within the construction industry. With regards to these issues the underlying principles of relationship marketing for building contractors in the UK construction industry is laid out on page 52 of this thesis. (Also see Industrial Marketing and Purchasing, Traditional Marketing and Trust).

Referee: Party providing a reference. Reference being defined as a 'written testimonial about someone's character and abilities' (Powell-Smith and Chappell 1985 p.368).

In this research, a referee also means a form of organised marketing communications. A past client or client consultant agrees with a contractor to act as advocate for that contractor by giving a written or verbal testimony on the contractor's behalf regarding their abilities, thus helping them to win contracts in future (Also see Referral Markets, Reputation and Word of Mouth).

Referral Markets: 'Getting clients to do the marketing for you. Having existing and past clients work as advocates for the contractor to potential new and repeat business clients of the future' (Adapted from Payne 1995 p.31 in Thompson 1996 p.84)

'Referred to differently under various names within different industry sectors. Such as: intermediaries, connectors, multipliers, third-party markets, agencies, networks and referral sources. In most industries they have two things in common, they are becoming more important and there are more of them' (Christopher et al 1993 p.24).

'Whilst many organisations recognise that customers can be the most legitimate source of referrals to their prospective customers, there is a strong tendency by most companies to simply let referrals happen rather than to develop marketing activities seeking to leverage the power of the advocacy' (Peck et al 1999 p.225).

'The present and likely future importance of these referral sources should be identified and a specific plan developed to determine the appropriate level of marketing resources that should be devoted to them' (Christopher et al 1993 p.24).

A Company should start, by identifying the key referral sources (Christopher 1993 p. 24). The contractor should determine those referees that the client is most likely to depend upon and develop positive relationships with them rather than simply pushing references that the contractor wants the potential client to see (Also see Advocate, Referee, Reputation, Word-of-Mouth)

Reputation: Recognised as essential in pre-qualification criteria for short-listing contractors (see table 2.4 - chapter 2). According to Fombrun (1996 p.3);

'A reputation embodies the history of other peoples' experiences with that service provider. Good reputations increase credibility, making us more confident that we'll get what we are promised'. Corporate reputation has been defined as;

'The overall estimation in which a company is held by its constituents (customers, suppliers, investors, employees and the general public). It represents their net affective or emotional reaction (good or bad, weak or strong) to the company name (Fombrun's 1996 p.37).

'Corporate reputations are perceptions held by people inside and outside a company' (Fombrun 1996 p.57). 'The key point is that reputation consists of perceptions (how others see you). Because reputation is not directly under anyone's control, it is difficult to manipulate' (Fombrun 1996 p.59). This in contrast to organised references decided by the contractor (See referee).

Temporary Multi-organisation (TMO): A Term developed by Cherns and Bryant (1984 p.181). Essentially developed around a construction project and involves, *'...the engagement of parts of several separate and diverse organisations - client, consultant, contractor etc. - for the limited and finite purpose of bringing a building into being from inception to completion.. The business of managing the whole process is the function of a special kind of organisation that is set up for this purpose. It may be called a "project team". It is in fact, a multi-organisation since its membership is drawn from representatives of many different organisations'.*

Cherns and Bryant (1984 p.181) call this the 'Temporary Multi-organisation' (TMO). In this, teams of individuals and companies are pulled together either simultaneously and/or sequentially throughout the life of a project. During which, right up to when the building is commissioned and handed over, different parts of the team come together and disband with contributing parties going on to other disparate projects.

Traditional Marketing: Also referred to as 'Transactional Marketing', means the major focus of the marketing program (the Four P's) is to make customers buy. Independence among marketing actors (arms length) is considered vital for marketing efficiency. Also see IMP, Interactive, Networks and Relationship Marketing (Hollensen 2003 p.769).

Trust: Defined in the Concise Oxford Dictionary as, 'firm belief in reliability, honesty, veracity, justice, strength etc., of person or thing'. Confident expectation that person or thing confided in will behave responsibly, without need for close examination or evidence. That one places *trust* in, believes in, rely on the character or behaviour of person. That this will not lead to misuse/misgivings.

A complex construct for definition, the nature of which is determined by circumstances and parties involved. Chapter three goes into some detail on this and in summary defines client trust in contractors according to three points, as;

- willing reliance upon a contractor, under conditions of reduced control,
- the contractor having earned the clients confidence in their word, ability and motivation, to carry out actions as agreed to the best of their ability,
- avoiding unfair opportunistic behaviour against the client, under complex conditions of uncertainty.

Word-of-Mouth (WOM): 'Word-of-Mouth (WOM) is one of the most important factors in acquiring customers' (Peck et al 1999 p.224). Mangold et al (1999 p.74), highlight how WOM, relates to customers' satisfaction or dissatisfaction with previous purchasing experiences. It works through a series of interpersonal networks of people talking about their experiences of a product or service provider. A form of communication behaviour referred to as informal (and therefore unpaid) interpersonal communication that plays an important role in shaping customers' attitudes and behaviours (Mangold et al 1999; Brown and Reingen 1987; Reingen and Kernan (1986). (Also see Referee, Expectations and Reputation).

VALIDATION OF CONDITIONS OF TRUST
IN-DEPTH INTERVIEWS.

Introduction ☐ Tape ☐

PART A: Attitude to Trust (Aact)

(Introduce Show Card 1) Ask whether they are satisfied with all the phases, or whether there is something they wish to add or change. ☐

START: In your capacity as someone representing a client organisation, I want you to think about the trust you have in contractors. In particular, think about the role and level of importance you consider trust plays during each of the phases shown on card 1. I'm going to allow you a minute to think about this. ☐

Now, in your capacity as someone representing your organisation as a client requiring a contractors services, one at a time, quickly explain to me your opinion on the role and importance trust plays in each phase shown on the card:

Courting	☐
Briefing	☐
Design	☐
Pre-Qualification	☐
Tendering	☐
Post-Tender Neg.	☐
Awarding Contract	☐
Construction	☐
Completion	☐
Commissioning	☐
Handing-over	☐
Follow-up	☐

Notes:

You have commented on each phase shown. Now, generally speaking, can you quickly give me what your overall opinion is toward trusting contractors. ☐

Generally speaking, can you tell me what you consider to be the good and bad consequences of trusting a contractor ? ☐

That marks the end of part A in this interview. Is there anything you wish to add or comment on before continuing on to part B. ☐

PART B: Conditions of Trust (c)

(Take-Away Show Card 1 and Introduce Show Card 2) ☐

I am now going to reveal to you 10 words that might characterise a contractor. I will reveal each new characteristic one at a time. As we go, I want you to describe to me two things in relation to each characteristic revealed. ☐

One, is to describe an event or occasion related to that characteristic shown, which resulted in the building of trust by you, the client, in a contractor. ☐

Two, describe an event or occasion which resulted in the undermining or destruction of trust by you, the client, in a contractor. ☐

Availability	☐
Competence	☐
Consistency	☐
Discretion	☐
Fairness	☐
Integrity	☐
Loyalty	☐
Openness	☐
Promise Fulfilment	☐
Receptivity	☐

Notes:

You have now commented on each characteristic shown. Is there anything you wish to add, ask or mention generally, to what has been covered so far. ☐

Notes:

That marks the end of part B in this interview. We shall now continuing on to part C. The final part. ☐

PART C: Subjective Norms (SN)

(Take-Away Show Card 2 and Introduce Show Card 3)

If you, the client, were faced with the question of whether a contractor was(is) trustworthy or not, there may be individuals or organisations you can consult, who may be able to advise you. Individual's or organisations, who's opinion you might value.

Can you list for me, those, who's opinions you might seek, if you were trying to establish a contractors level of trustworthiness ? ☐

Notes:

Card 1

The role and importance of *trust* during the;

Courting

Briefing

Design

Pre-qualification

Tendering

Post-tender Negotiation

Awarding Contracts

During Construction

Completion

Commissioning

Handing-over

Follow-up

Phase in the project development process.

Card 2

For each word following, describe an event or occasion which;

1. **resulted in the building or reinforcement of trust**
2. **resulted in the undermining or destruction of trust**

by you the client, in a contractor.

Availability

Competence

Consistency

Discretion

Fairness

Integrity

Loyalty

Openness

Promise-fulfilment

Receptivity

Card 3

Whose opinion, concerning a contractors trustworthiness, might you seek during the;

Courting

Briefing

Design

Pre-qualification

Tendering

Post-tender Negotiation

Awarding Contracts

During Construction

Completion

Commissioning

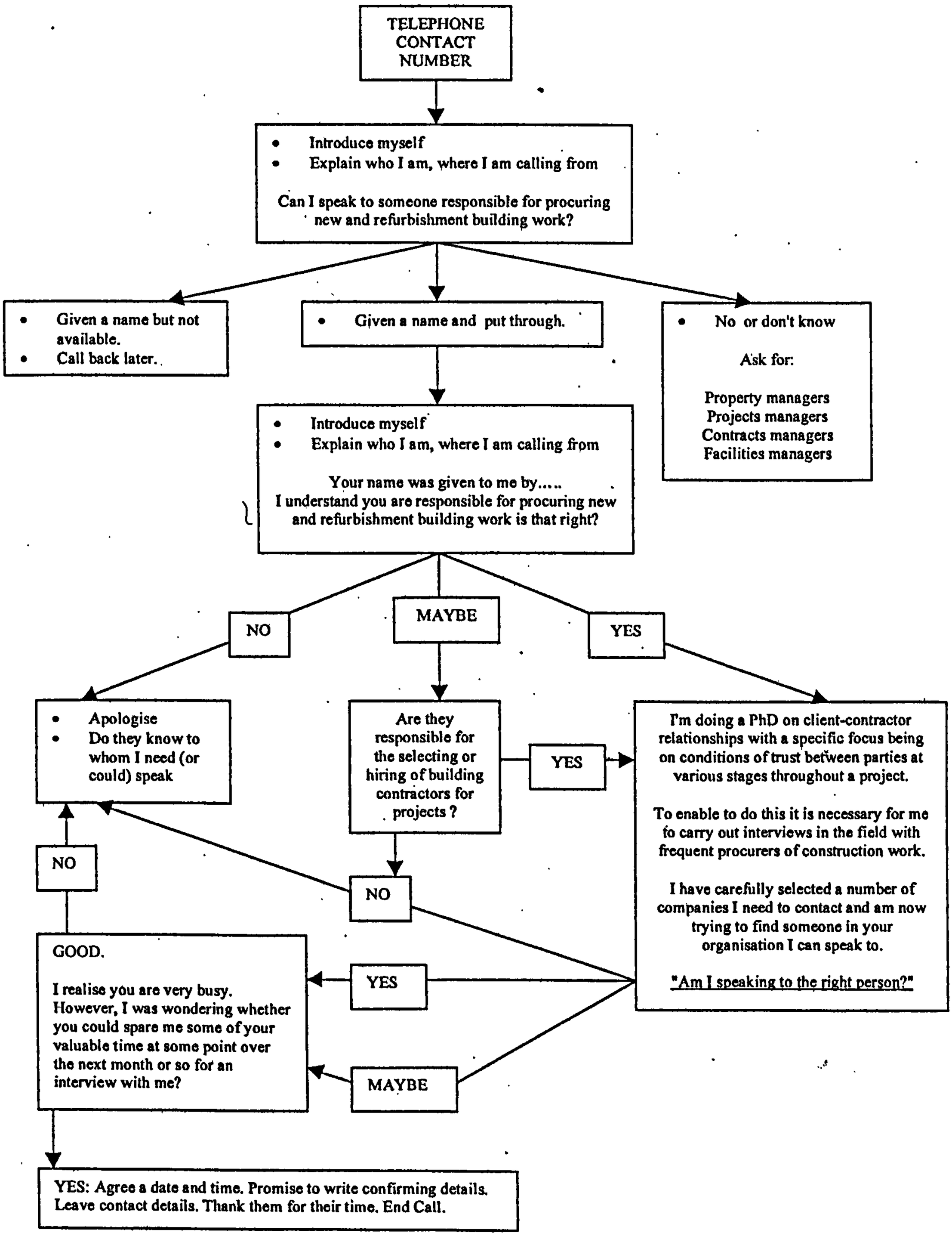
Handing-over

Follow-up

Phase in the project development process.

CALL MAP

APPENDIX B.5



CLAUSES	CASES	1A	1B	2A	2B	3A	3B	4A	5A	5B	6A	6B	7A	7B	8A	8B	9A	9B	TOTAL
Something one shouldn't seek to pursue.				188															
Can be taken for a ride (take advantage), if he can see away to do that.					140			072											
Particularly if you're laying all your cards on the table.								073											
To much openness leaves you wide open can be taken advantage off (You expose yourself).								075		280									
If taken advantage of, very hard to change your mind, about that particular person or particular contractor.		197																	
See fairness.								076											
Conditions of Trust (c)																			
Availability:																			
In terms of ability to commence.								125											
During construction phase.						307			154										
Should they have tendered in 1st place because too busy.						308	458		381										
Where a contractor you want might not be available, whilst its annoying, one might assume its because they are a good contractor, therefore very busy.					189														
Alternatively, contractor that is available can get on with job.					194		458												
Experience has shown that with a good contractor you can get in contact at any stage.					224			136											
Where person you're dealing with is unavailable and doesn't get back to you.								139	159										
No response when trying to contact them undermines trust in them.								144	159										
If can't find out what's going on trust becomes undermined.									159										
Availability of access to a person is quite important.				255	224		189		159										
During contract, its more to do with comfort than trust.						316													
Occassions where people try avoid you, know there's a problem & become unavailable.				267															
Of contractor when dealing with snagging and defects, after contracts finished.		235																	
If I turn up at site unannounced and contractor still prepared to take you around.									157										
If contractor has contact available regularly as I require.				243	224	316	198	129											
If I know I can get them if I need to builds trust.								136											

CLAUSES / CASES	1A	1B	2A	2B	3A	3B	4A	5A	5B	6A	6B	7A	7B	8A	8B	9A	9B	TOTAL
Where I, not the main contractor, notices a problem/mistake, that distroys trust in them.							172											
Contractors ability to solve problems.						234												
Contractor foresees type of problems.		280				234												
Our understanding of a contractors competence comes from our experience of that contractor.						234												
Is contractor flexible.						235												
See Receptiveness.						235												
Competence is judge upon the last job.						238												
See Consistency.						238												
Contractors experience with type of project, helps get over problems.	294	280				238		019										
For me contractors competence is judged by feedback I get back, reports from 3rd parties, or my people.						239												
See Consistency.						239												
Consistency:																		
Throughout single job might vary, e.g structure of a building very nice, then with finishings, competence deteriorates.								212										
Where quality & performance fails to be consistent throughout a project unlikely they will be used again.								215										
With low bid, contractor was keen at beginning of job, but less so at end, where profits were squeezed due to rising costs & supplier problems.								230										
With large contractors the Bovis's and Laings', consistency difficult because they sub-contract so much of the work.							182											
Don't know which sub-contractors are doing what, & certainly don't know the individuals.							184											
Contractor has to be consistently fair interms of quality and price, value for money, otherwise we won't use them again.						372												
It's very rare that main contractor has continued to end of a project.						062												
Same as competence ?				257		261												
From D&B project client left with good impression, contractor was therefore invited to tender for other projects based on this.									407									
Past performance places expectations on future performance.	303	286			441	238			410									

OXFORD BROOKES UNIVERSITY

CIVIL ENGINEERING AND BUILDING
School of Construction and Earth Sciences

Client Perspective of Relationships Between Clients and Contractors Operating Within Complex Exchange Systems Made up of Temporary Multi-Organisations...

Nicholas Thompson.

PLEASE READ:

In this survey I am interested in purely your opinion and not that of your colleagues or what you consider to be your colleagues' opinion.

Each questionnaire is coded in order to ensure your anonymity, to any person other than me.

Please complete the whole questionnaire. *Where you are indifferent in your response to a statement or do not know the answer to a question, tick or circle the neutral option.*

It is expected that this will take in the region of half an hour to complete and there is a reply-paid envelope addressed to me enclosed for your completed questionnaire.

If there are any problems or queries you would like to discuss with me I can be contacted as follows: Nicholas Thompson on 01865 483346 or 483360.

Many thanks.

SECTION ONE: CLIENT BACKGROUND

1. Within your organisation, are you the person who is chiefly responsible for the procurement of building contractors services for new and/or refurbishment construction work ?

(a) YES ☐ (b) NO ☐

If no would you be kind enough to pass this questionnaire on to the right person...

2. Please state your job title in the client organisation:.....

.....

3. As a client organisation for building contractors' services, please tick the sectors your company is involved in:

(a) Offices ☐
(b) Retail ☐
(c) Industrial ☐
(d) Infrastructure ☐
(e) Housing ☐
(f) Hotels ☐
(g) Leisure ☐
(g) Others ☐

If you have ticked the 'Others' box please specify the other sector(s) here:.....

.....

4. Against the scale shown and in the appropriate column given on the next page please indicate the following items:

(I) The approximate level of your organisation's current annual works budget (in £'s) in total for new *and* refurbishment building work in the UK.

(II) Please indicate the approximate level of your annual works budget under your remit (in £'s) in total for new and refurbishment building work in the UK.

(III) Please indicate the approximate level of your works budget under your remit for new and refurbishment building work in the UK over the next three years.

			4(i)	4(ii)	4(iii)
(a)	0	to 1,000,000	☐	☐	☐
(b)	1,000,001	to 5,000,000	☐	☐	☐
(c)	5,000,001	to 10,000,000	☐	☐	☐
(d)	10,000,001	to 50,000,000	☐	☐	☐
(e)	50,000,001	to 100,000,000	☐	☐	☐
(f)	100,000,001	to 500,000,000	☐	☐	☐
(g)	Greater than 500,000,000		☐	☐	☐

Questionnaire continues over the page with section 2.

SECTION TWO: RECENT CONTRACTOR BEHAVIOUR

For this section, please think of the last building contractor who worked for you, that is, the most recent contractor to have completed and handed over finished new or refurbished building work to you as the client organisation.

5. What form of contract was it (e g. JCT81 Design and Build) ?..... .....

.....

6i. Did you appoint a client representative ? YES ☐ NO ☐

6ii. If so, was the representative internal or external ? Internal ☐ External ☐

Below are a series of statements, divided into groups of four. Please keep your contractor in mind as you circle a number to the right of each statement. Show how you respond to that statement using the key below:

Please use this key: 5 = Totally Agree
4 = Somewhat Agree
3 = Neutral
2 = Somewhat Disagree
1 = Totally Disagree

7. Please indicate to what extent you, as client, agree or disagree with the following statements in relation to your above chosen contractor:

You were able to contact the contractor's contracts manager, as and when you required	1 2 3 4 5
You were often able to talk to the contracts manager quickly and directly	1 2 3 4 5
The contracts manager always attended the site meetings	1 2 3 4 5
The contracts manager was generally unavailable whenever you tried to needed him/her.	1 2 3 4 5
You found the directors of the contracting firm to be good at organising their staff around the project	1 2 3 4 5
Site office staff managed the site well	1 2 3 4 5
Sub-contractors employed on the project, executed their tasks skilfully	1 2 3 4 5
Once on site you discovered the contractor lacked the competence to carry out the project as well as you would have liked	1 2 3 4 5

From starting on site through to final account the contractor's performance matched your expectations.	1 2 3 4 5
The contractor's negotiating team and site team had a consistent attitude toward satisfying your requirements for this project	1 2 3 4 5
The quality of work carried out on site changed little throughout the entire project	1 2 3 4 5
You or your representative found there to be discrepancies between the standard of work you expected and that delivered	1 2 3 4 5
The directors were discreet when in possession of confidential information	1 2 3 4 5
The site team were careful about disclosing sensitive information	1 2 3 4 5
Trades people conducted themselves in a professional manner throughout their involvement on the project	1 2 3 4 5
Lacking confidence in the contractor's overall discretion, you decided to reveal only information which was strictly neccessary	1 2 3 4 5
The contractor was reasonable with regard to carrying out variations	1 2 3 4 5
The contractor was fair with regards to costs incurred due to variations	1 2 3 4 5
The contractor readily accepted responsibility for costs incurred by his mistakes	1 2 3 4 5
You generally found the contractor to behave unreasonably where problems occurred, always trying to get away with what he could	1 2 3 4 5
The contractor dealt honestly with you, the client	1 2 3 4 5
As far as you are aware, the contractor's own site team were good at identifying issues and problems with the work they were doing	1 2 3 4 5
You felt confident that you could rely and make decisions based on what the contractor was telling you	1 2 3 4 5
During the project you or your representative felt the contractor sometimes disguised the facts or their true position on important issues	1 2 3 4 5

The contractor did not allow other projects to interfere with yours	1 2 3 4 5
The contractor did not take advantage or behave opportunistically when problems and variations arose	1 2 3 4 5
At no time did the contractor do anything that reflected badly on you as the client	1 2 3 4 5
The contractor was too busy to give your project the full attention that it should have had	1 2 3 4 5
The contractor's quantity surveyors had an open approach with regards to project costs	1 2 3 4 5
Where variations and extras were agreed, the contractor showed how any additional cost was arrived at	1 2 3 4 5
Where problems occurred the contractor always came forward to discuss them	1 2 3 4 5
The contractor was reluctant to disclose important information that might reflect badly on the progress of the project	1 2 3 4 5
You were confident in the contractor and the quality of service he provided throughout the project	1 2 3 4 5
The contractor always behaved in a trustworthy manner	1 2 3 4 5
During the project the contractor did nothing to undermine your confidence in him	1 2 3 4 5
Sometimes you felt the contractor was not entirely reliable	1 2 3 4 5
The contractor fulfilled promises made during tender and post-tender negotiations	1 2 3 4 5
Action points agreed by the contractor during site meetings were always carried out	1 2 3 4 5
The contractor has fulfilled his obligations to you the client during the defects liability period	1 2 3 4 5
In practice the contractor generally fell short of expectations	1 2 3 4 5

Remember: 1 = Totally Disagree and 5 = Totally Agree

During the tender and post-tender negotiations the contractor clearly understood your requirements for this project	1 2 3 4 5
The contractors site management were responsive to your problems and requests during construction	1 2 3 4 5
The contractor dealt decisively with issues as they arose	1 2 3 4 5
The contractor simply paid lip service to your requirements and expectations from the project and then ignored them	1 2 3 4 5

8. To what extent did your recent experience of this contractor affect your confidence in him.

Your *confidence* has been:	LOWERED Very Much	Somewhat	Same	Somewhat	RAISED Very Much
	☐	☐	☐	☐	☐

Questionnaire continues over the page with section 3.

Please remember;

...in finishing the questionnaire continue to think of this last building contractor, who completed and handed over finished new or refurbished building work to you the client.

SECTION THREE: THIRD PARTY OPINION

9. In the event you considered awarding another contract to this same contractor, but in doing so, were faced with the question of whether or not to trust him, to what extent do you think it likely or unlikely that the people listed below would think you should trust this contractor:

	LIKELY Extremely	Quite	Neutral	Quite	UNLIKELY Extremely
(a) The Architect	☐	☐	☐	☐	☐
(b) Contractor's Previous Clients	☐	☐	☐	☐	☐
(c) Sub-contractors of the contractor	☐	☐	☐	☐	☐
(d) Suppliers to the contractor	☐	☐	☐	☐	☐
(e) Your Quantity Surveyor	☐	☐	☐	☐	☐
(f) Your Building Surveyor	☐	☐	☐	☐	☐
(g) Engineers involved in the project	☐	☐	☐	☐	☐
(h) Colleagues in your firm	☐	☐	☐	☐	☐

10. With some people's opinions, you may be more or less willing to act upon them. Indicate how much you agree or disagree that you would wish to act upon the opinions about the contractor's trustworthiness held by the people listed below:

	AGREE Totally	Somewhat	Neutral	Somewhat	DISAGREE Totally
(a) The Architect	☐	☐	☐	☐	☐
(b) Contractor's Previous Clients	☐	☐	☐	☐	☐
(c) Sub-contractors of the contractor	☐	☐	☐	☐	☐
(d) Suppliers to the contractor	☐	☐	☐	☐	☐
(e) Your Quantity Surveyor	☐	☐	☐	☐	☐
(f) Your Building Surveyor	☐	☐	☐	☐	☐
(g) Engineers involved with the project	☐	☐	☐	☐	☐
(h) Colleagues in your firm	☐	☐	☐	☐	☐

SECTION FOUR: BELIEFS ABOUT TRUSTING YOUR CONTRACTOR

11. If in future you did award another contract to this same contractor and in doing so, gave them a high level of trust to carry out their part in the project, how far do you think it likely or unlikely this would result in the following:

	LIKELY Extremely	Quite	Neutral	Quite	UNLIKELY Extremely
(a) I or my agent would be able to reduce the number of site visits made during the project, compared to last time	☐	☐	☐	☐	☐
(b) Greater chance of an overall successful project	☐	☐	☐	☐	☐
(c) Less monitoring of contractor's performance in terms of quality checks would be needed	☐	☐	☐	☐	☐
(d) Fewer problems with disclosure of information between the contractor, my agent and myself	☐	☐	☐	☐	☐
(e) Place an unreasonable expectation on me, the client, to accept the contractor would perform as agreed	☐	☐	☐	☐	☐
(f) Client more likely to be taken advantage of in terms of amount of profit contractor makes	☐	☐	☐	☐	☐
(g) Contractor more likely to behave opportunistically with regard to claims	☐	☐	☐	☐	☐

12. Given that trusting the contractor might induce the outcomes listed above, please indicate to what extent you consider them to be of a beneficial or detrimental nature.

	BENEFICIAL Totally	Somewhat	Neutral	DETRIMENTAL Somewhat	Totally
(a) I or my agent would be able to reduce the number of site visits made during the project, compared to last time	☐	☐	☐	☐	☐
(b) Greater chance of an overall successful project	☐	☐	☐	☐	☐
(c) Less monitoring of contractor's performance in terms of quality checks would be needed	☐	☐	☐	☐	☐
(d) Fewer problems with disclosure of information between the contractor, my agent and myself	☐	☐	☐	☐	☐
(e) Place an unreasonable expectation on me, the client, to accept the contractor would perform as agreed	☐	☐	☐	☐	☐
(f) Client more likely to be taken advantage of in terms of amount of profit contractor makes	☐	☐	☐	☐	☐
(g) Contractor more likely to behave opportunistically with regard to claims	☐	☐	☐	☐	☐

SECTION FIVE: ATTITUDE TOWARD TRUSTING THE CONTRACTOR.

I am now interested in your general attitude toward *trusting* this contractor in the event you were to use them again.

13. Trusting this contractor would be:

	IMPORTANT Extremely	Quite	Neutral	Quite	UNIMPORTANT Extremely
(a)	☐	☐	☐	☐	☐

	REASONABLE Extremely	Quite	Neutral	Quite	UNREASONABLE Extremely
(b)	☐	☐	☐	☐	☐

	BENEFICIAL Extremely	Quite	Neutral	Quite	DETRIMENTAL Extremely
(c)	☐	☐	☐	☐	☐

14. With a tick please indicate to what extent you consider the following statement likely or unlikely.

In the event I have future dealings with this same contractor, the opinion of most other people would be that this contractor could be *trusted*.

LIKELY Extremely	Quite	Neutral	Quite	UNLIKELY Extremely
☐	☐	☐	☐	☐

15. With a tick please indicate to what extent you agree or disagree with the following statement.

In the event you employed them again, you would give this contractor a high level of *trust*.

AGREE Totally	Somewhat	Neutral	Somewhat	DISAGREE Totally
☐	☐	☐	☐	☐

END and THANK YOU. Please return your questionnaire in the envelope provided.

Appendix D.1

RELIABILITY ANALYSIS - SCALE (ALPHA)

b.e1
b.e2
b.e3
b.e4
b.e5
b.e6
b.e7

Reliability Coefficients

N of Cases = 124.0 N of Items = 7

Alpha = .4815

RELIABILITY ANALYSIS - SCALE (ALPHA)

b1
b2
b3
b4
b5
b6
b7

Reliability Coefficients

N of Cases = 124.0 N of Items = 7

Alpha = .3972

RELIABILITY ANALYSIS - SCALE (ALPHA)

e1
e2
e3
e4
e5
e6
e7

Reliability Coefficients

N of Cases = 124.0 N of Items = 7

Alpha = .5991

Appendix D.2

RELIABILITY ANALYSIS - SCALE (ALPHA)

b.e2
b.e3
b.e4

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .6982

RELIABILITY ANALYSIS - SCALE (ALPHA)

b2
b3
b4

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .7304

RELIABILITY ANALYSIS - SCALE (ALPHA)

e2
e3
e4

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .7189

Appendix D.3

PEARSON CORRELATION COEFFICIENTS

	SUMAC2_3	SUMBE2_4
SUMAC2_3	1.0000	.3011
	(124)	(124)
	P= .	P= .001
SUMBE2_4	.3011	1.0000
	(124)	(124)
	P= .001	P= .

(Coefficient / (Cases) / 2-tailed Significance)
" . " is printed if a coefficient cannot be computed

Appendix D.4

PEARSON CORRELATION COEFFICIENTS

	B.E2	B.E3	B.E4
B.E2	1.0000	.3647	.5357
	(124)	(124)	(124)
	P= .	P= .000	P= .000
B.E3	.3647	1.0000	.5360
	(124)	(124)	(124)
	P= .000	P= .	P= .000
B.E4	.5357	.5360	1.0000
	(124)	(124)	(124)
	P= .000	P= .000	P= .

(Coefficient / (Cases) / 2-tailed Significance)
" . " is printed if a coefficient cannot be computed

Appendix D.5

PEARSON CORRELATION COEFFICIENTS

	B.E1	B.E3	B.E4
B.E1	1.0000	.7379	.3857
	(124)	(124)	(124)
	P= .	P= .000	P= .000
B.E3	.7379	1.0000	.5360
	(124)	(124)	(124)
	P= .000	P= .	P= .000
B.E4	.3857	.5360	1.0000
	(124)	(124)	(124)
	P= .000	P= .000	P= .

(Coefficient / (Cases) / 2-tailed Significance)
" . " is printed if a coefficient cannot be computed

Appendix D.6

****** MULTIPLE REGRESSION ******

Listwise Deletion of Missing Data

Equation Number 1 Dependent Variable.. BEHAV

Block Number 1. Method: Enter SUMAC2_3

Variable(s) Entered on Step Number
1.. SUMAC2_3

Multiple R .58925
R Square .34722
Adjusted R Square .34187
Standard Error .75024

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	1	36.52509	36.52509
Residual	122	68.66846	.56286

F = 64.89239 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SUMAC2_3	.352625	.043774	.58925	8.056	.0000
(Constant)	.761146	.177114		4.297	.0000

End Block Number 1 All requested variables entered.

PEARSON CORRELATION COEFFICIENTS

Appendix D.7

	BEHAV	SUMAC2_3
BEHAV	1.0000	.5893
	(124)	(124)
	P=.	P=.000
SUMAC2_3	.5893	1.0000
	(124)	(124)
	P=.000	P=.

(Coefficient / (Cases) / 2-tailed Significance)
" . " is printed if a coefficient cannot be computed

Appendix D.8

RELIABILITY ANALYSIS - SCALE (ALPHA)

nb.mc1
nb.mc2
nb.mc3
nb.mc4
nb.mc5
nb.mc6
nb.mc7
nb.mc8

Reliability Coefficients

N of Cases = 124.0 N of Items = 8

Alpha = .8454

RELIABILITY ANALYSIS - SCALE (ALPHA)

nb1
nb2
nb3
nb4
nb5
nb6
nb7
nb8

Reliability Coefficients

N of Cases = 124.0 N of Items = 8

Alpha = .8936

RELIABILITY ANALYSIS - SCALE (ALPHA)

mc1
mc2
mc3
mc4
mc5
mc6
mc7
mc8

Reliability Coefficients

N of Cases = 124.0 N of Items = 8

Alpha = .8201

PEARSON CORRELATION COEFFICIENTS

Appendix D.9

	SN	NMC1238
SN	1.0000	.4979
	(124)	(124)
	P= .	P= .000
NMC1238	.4979	1.0000
	(124)	(124)
	P= .000	P= .

(Coefficient / (Cases) / 2-tailed Significance)
" . " is printed if a coefficient cannot be computed

Appendix D.10

RELIABILITY ANALYSIS - SCALE (ALPHA)

nb.mc1
nb.mc2
nb.mc3
nb.mc8

Reliability Coefficients

N of Cases = 124.0 N of Items = 4

Alpha = .7427

RELIABILITY ANALYSIS - SCALE (ALPHA)

nb1
nb2
nb3
nb8

Reliability Coefficients

N of Cases = 124.0 N of Items = 4

Alpha = .7831

RELIABILITY ANALYSIS - SCALE (ALPHA)

mc1
mc2
mc3
mc8

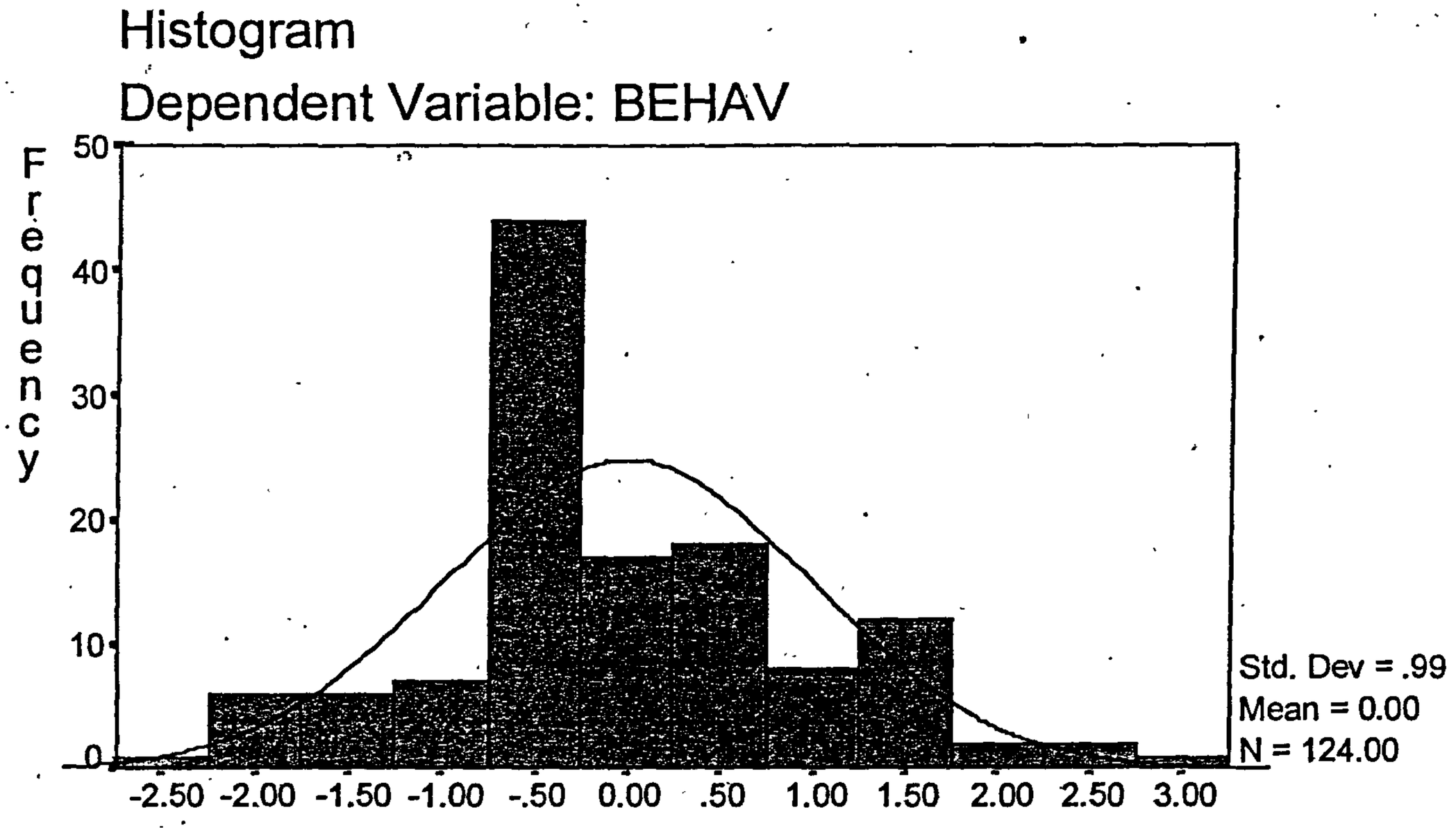
Reliability Coefficients

N of Cases = 124.0 N of Items = 4

Alpha = .6487

Histogram of Residuals in Examining Normality Assumption for the Unmodified Reasoned Action Model (RAM with Aact & SN).

Appendix D.11



'It is unreasonable to expect the observed residuals to be exactly normal - some deviation is expected because of sampling variation' (1993 *SPSS for Windows - Base System Users Guide, Release 6 p.329*). A normal distribution is superimposed on a histogram of observed frequencies (indicated by the bars). In the histogram the distribution does not appear entirely ideal, since there is an exaggerated column just of centre with some fluctuation on the right before having a slightly extended tail, it may be argued that a strict normality assumption has been violated. However, it is very unlikely that in a study such as this there was ever going to be a normal distribution. In a meta-analysis of some 87 applications of Reasoned Action carried out by Sheppard, Hartwick and Warshaw (1988) there is no mention of residuals and the question of whether normality assumptions were violated or not. Lacking any clear reference to the use of residuals whilst using Reasoned Action Theory prevents any sound comparison for determining level of acceptability. This problem therefore remains open to personal interpretation and at the reader's discretion.

* * * * M U L T I P L E R E G R E S S I O N * * * *

Chosen Reasoned Action Model.

Listwise Deletion of Missing Data

Equation Number 1 Dependent Variable.. BEHAV

Block Number 1. Method: Enter SUMAC2_3 SN

Variable(s) Entered on Step Number 1.. SN
2.. SUMAC2_3

Multiple R	.75183
R Square	.56525
Adjusted R Square	.55807
Standard Error	.61478

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	2	59.46108	29.73054
Residual	121	45.73247	.37795

F = 78.66173 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SN	.530462	.068095	.529465	7.790	.0000
SUMAC2_3	.203261	.040673	.339659	4.997	.0000
(Constant)	.280521	.157705		1.779	.0778

End Block Number 1 All requested variables entered.

PEARSON CORRELATION COEFFICIENTS

Appendix D.13

	BEHAV	SN	SUMAC2_3
BEHAV	1.0000	.6896	.5893
	(124)	(124)	(124)
	P= .	P= .000	P= .000
SN	.6896	1.0000	.4714
	(124)	(124)	(124)
	P= .000	P= .	P= .000
SUMAC2_3	.5893	.4714	1.0000
	(124)	(124)	(124)
	P= .000	P= .000	P= .

(Coefficient / (Cases) / 2-tailed Significance)
" . " is printed if a coefficient cannot be computed

RELIABILITY ANALYSIS - SCALE (ALPHA)

Av1
Av2
Av3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .8484

RELIABILITY ANALYSIS - SCALE (ALPHA)

Com1
Com2
Com3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .8567

RELIABILITY ANALYSIS - SCALE (ALPHA)

Con1
Con2
Con3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .8310

RELIABILITY ANALYSIS - SCALE (ALPHA)

Dis1
Dis2
Dis3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .7158

RELIABILITY ANALYSIS - SCALE (ALPHA)

Fair1
Fair2
Fair3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .8195

RELIABILITY ANALYSIS - SCALE (ALPHA)

Int1
Int2
Int3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .8781

RELIABILITY ANALYSIS - SCALE (ALPHA)

Loy1
Loy2
Loy3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .7459

RELIABILITY ANALYSIS - SCALE (ALPHA)

Open1
Open2
Open3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .7632

RELIABILITY ANALYSIS - SCALE (ALPHA)

Prom1
Prom2
Prom3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .8602

RELIABILITY ANALYSIS - SCALE (ALPHA)

Rec1
Rec2
Rec3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .8708

RELIABILITY ANALYSIS - SCALE (ALPHA)

Trust1
Trust2
Trust3

Reliability Coefficients

N of Cases = 124.0 N of Items = 3

Alpha = .9385

Internal Consistency Within Each CTI Category Using Pearson's Correlation Coefficient Between Trust and Mistrust Items (No. = 124).

	Mistrust Item:	Avail4	Comp4	Cons4	Disc4	Fair4	Inte4	Loya4	Open4	Prom4	Rece4	Trus4
Trust Items:	1	- 0.40 p=.000	- 0.50 p=.000	- 0.53 p=.000	- 0.36 p=.000	- 0.52 p=.000	- 0.52 p=.000	- 0.58 p=.000	- 0.54 p=.000	- 0.65 p=.000	- 0.56 p=.000	-0.65 p=.000
	2	- 0.34 p=.000	- 0.41 p=.000	- 0.34 p=.000	- 0.28 p=.002	- 0.62 p=.000	- 0.54 p=.000	- 0.56 p=.000	- 0.37 p=.000	- 0.59 p=.000	- 0.66 p=.000	-0.65 p=.000
	3	- 0.27 p=.003	- 0.40 p=.000	- 0.36 p=.000	- 0.44 p=.000	- 0.58 p=.000	- 0.59 p=.000	- 0.49 p=.000	- 0.65 p=.000	- 0.60 p=.000	- 0.67 p=.000	-0.67 p=.000

Appendix D.16

-- Pearson Correlation Coefficients --

	SUMTR123	SUMAV123	SUMCOM3	SUMCON3	SUMDI123	SUMFA123
SUMTR123	1.0000	.5137	.7307	.8251	.6741	.7331
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.	P=.000	P=.000	P=.000	P=.000	P=.000
SUMAV123	.5137	1.0000	.6502	.4541	.3899	.4216
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.	P=.000	P=.000	P=.000	P=.000
SUMCOM3	.7307	.6502	1.0000	.7267	.6147	.6018
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.000	P=.	P=.000	P=.000	P=.000
SUMCON3	.8251	.4541	.7267	1.0000	.6452	.7110
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.000	P=.000	P=.	P=.000	P=.000
SUMDI123	.6741	.3899	.6147	.6452	1.0000	.5745
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.000	P=.000	P=.000	P=.	P=.000
SUMFA123	.7331	.4216	.6018	.7110	.5745	1.0000
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.000	P=.000	P=.000	P=.000	P=.
SUMIN123	.8256	.4733	.6452	.7995	.6262	.7157
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.000	P=.000	P=.000	P=.000	P=.000
SUMLO123	.7827	.4717	.6748	.7557	.7063	.6901
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.000	P=.000	P=.000	P=.000	P=.000
SUMOP123	.6735	.4386	.5591	.6867	.5512	.6943
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.000	P=.000	P=.000	P=.000	P=.000
SUMPR123	.8168	.4792	.6861	.7719	.6263	.7728
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.000	P=.000	P=.000	P=.000	P=.000
SUMRE123	.8168	.4554	.6695	.8031	.6704	.6753
	(124)	(124)	(124)	(124)	(124)	(124)
	P=.000	P=.000	P=.000	P=.000	P=.000	P=.000

Appendix D.17

RELIABILITY ANALYSIS - SCALE (ALPHA)

SumInt123
SumRec123
SumLoy123
SumDis123
SumOpen123

Reliability Coefficients

N of Cases = 124.0 N of Items = 5

Alpha = .9174

RELIABILITY ANALYSIS - SCALE (ALPHA)

SumCon123
SumProm123
SumFair123
SumComp123
SumAvail123

Reliability Coefficients

N of Cases = 124.0 N of Items = 5

Alpha = .8954

Chosen Modified KAM

* * * * M U L T I P L E R E G R E S S I O N * * * *

Listwise Deletion of Missing Data

Equation Number 1 Dependent Variable.. BEHAV

Block Number 1. Method: Enter SUMAC2_3 SN SUMINVTR

Variable(s) Entered on Step Number 1.. SUMINVTR
2.. SUMAC2_3
3.. SN

		Analysis of Variance	DF	Sum of Squares	Mean Square
Multiple R	.76270				
R Square	.58171				
Adjusted R Square	.57125	Regression	3	61.19210	20.39737
Standard Error	.60554	Residual	120	44.00145	.36668
		F = 55.62734	Signif F = .0000		

---------- Variables in the Equation ----------

Variable	B	SE B	95% Confdnce Intrvl B		Beta	T	Sig T
SUMINVTR	.051041	.023491	.004529	.097552	.172508	2.173	.0318
SUMAC2_3	.197076	.040163	.117556	.276596	.329324	4.907	.0000
SN	.420147	.084121	.253593	.586702	.419357	4.995	.0000
(Constant)	.208250	.158856	-.106274	.522775		1.311	.1924

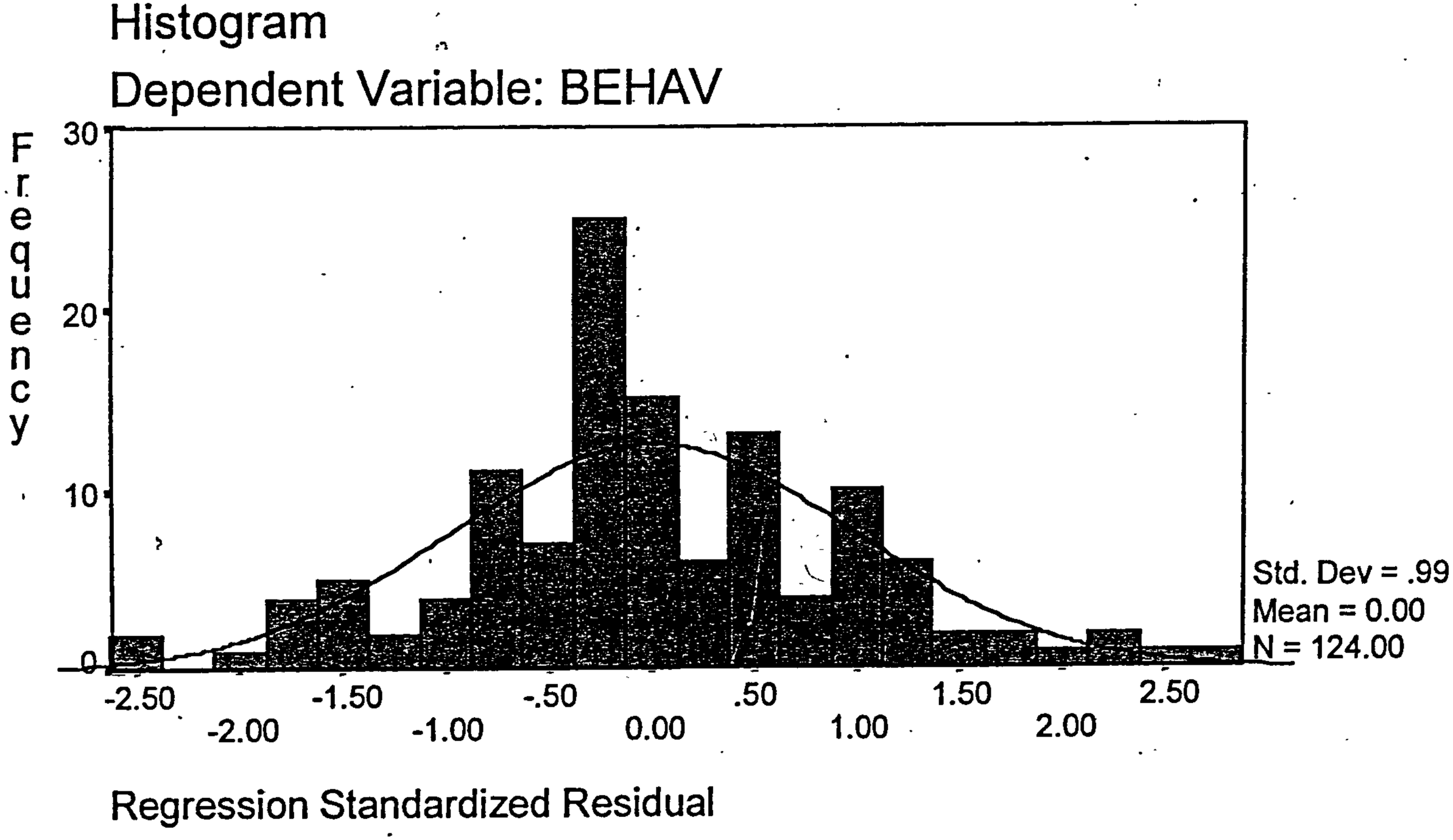
End Block Number 1 All requested variables entered.

PEARSON CORRELATION COEFFICIENTS **Appendix D.19**

	BEHAV	SN	SUMAC2_3	SUMINVTR
BEHAV	1.0000	.6896	.5893	.5708
	(124)	(124)	(124)	(124)
	P= .	P= .000	P= .000	P= .000
SN	.6896	1.0000	.4714	.6665
	(124)	(124)	(124)	(124)
	P= .000	P= .	P= .000	P= .000
SUMAC2_3	.5893	.4714	1.0000	.3608
	(124)	(124)	(124)	(124)
	P= .000	P= .000	P= .	P= .000
SUMINVTR	.5708	.6665	.3608	1.0000
	(124)	(124)	(124)	(124)
	P= .000	P= .000	P= .000	P= .

(Coefficient / (Cases) / 2-tailed Significance)
" . " is printed if a coefficient cannot be computed

Histogram of Residuals in Examining Normality Assumption for the Modified Reasoned Action Model (RAM with Aact, SN & PE)



See note regarding residuals and the strict normality assumption under Appendix C.11

* * * * M U L T I P L E R E G R E S S I O N * * * *

Listwise Deletion of Missing Data

Weighted Least Squares - Weighted By.. BUD3_1 Smash budget over 3 years

Equation Number 1 Dependent Variable.. BEHAV

Block Number 1. Method: Enter SUMAC2_3 SN SUMINVTR

Variable(s) Entered on Step Number 1.. SUMINVTR
2.. SUMAC2_3
3.. SN

Multiple R	.72379
R Square	.52387
Adjusted R Square	.48816
Standard Error	.64357

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	18.22832	6.07611
Residual	40	16.56713	.41418

F = 14.67027 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	95% Confdnce Intrvl B		Beta	T	Sig T
SUMINVTR	.120998	.048879	.022209	.219787	.406737	2.475	.0176
SUMAC2_3	.234258	.066269	.100323	.368192	.391448	3.535	.0010
SN	.181810	.172258	-.166337	.529956	.174106	1.055	.2976
(Constant)	.135520	.320707	-.512653	.783694		.423	.6749

End Block Number 1 All requested variables entered.

* * * * M U L T I P L E R E G R E S S I O N * * * *

Listwise Deletion of Missing Data

Weighted Least Squares - Weighted By.. BUD3_2 Median

Equation Number 1 Dependent Variable.. BEHAV

Block Number 1. Method: Enter SUMAC2_3 SN SUMINVTR

Variable(s) Entered on Step Number 1.. SUMINVTR
2.. SUMAC2_3
3.. SN

Multiple R	.79904
R Square	.63847
Adjusted R Square	.60993
Standard Error	.77565

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	40.37576	13.45859
Residual	38	22.86233	.60164

F = 22.36982 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
SUMINVTR	.052031	.036071	.191010	1.442	.1574
SUMAC2_3	.125130	.063528	.243598	1.970	.0562
SN	.440291	.132169	.482072	3.331	.0019
(Constant)	.422711	.229370		1.843	.0732

End Block Number 1 All requested variables entered.

* * * * M U L T I P L E R E G R E S S I O N * * * *

Listwise Deletion of Missing Data

Weighted Least Squares - Weighted By.. BUD3_3 Large

Equation Number 1 Dependent Variable.. BEHAV

Block Number 1. Method: Enter SUMAC2_3 SN SUMINVTR

Variable(s) Entered on Step Number 1.. SUMINVTR
2.. SUMAC2_3
3.. SN

Multiple R	.77382	Analysis of Variance			
R Square	.59879		DF	Sum of Squares	Mean Square
Adjusted R Square	.51282	Regression	3	30.73791	10.24597
Standard Error	1.21289	Residual	14	20.59543	1.47110

F = 6.96483 Signif F = .0042

---------- Variables in the Equation ----------

Variable	B	SE B	95% Confdnce Intrvl B		Beta	T	Sig T
SUMINVTR	-.074587	.074136	-.233593	.084420	-.235097	-1.006	.3315
SUMAC2_3	.135176	.163812	-.216166	.486518	.174455	.825	.4231
SN	.957660	.308264	.296499	1.618822	.801979	3.107	.0077
(Constant)	.106358	.496589	-.958719	1.171435		.214	.8335

End Block Number 1 All requested variables entered.

APPENDIX E.1

Results of Formal Hypothesis Testing – Null Hypothesis, Constructs, Tests, Results, Accept or Reject Hypothesis, Comment.

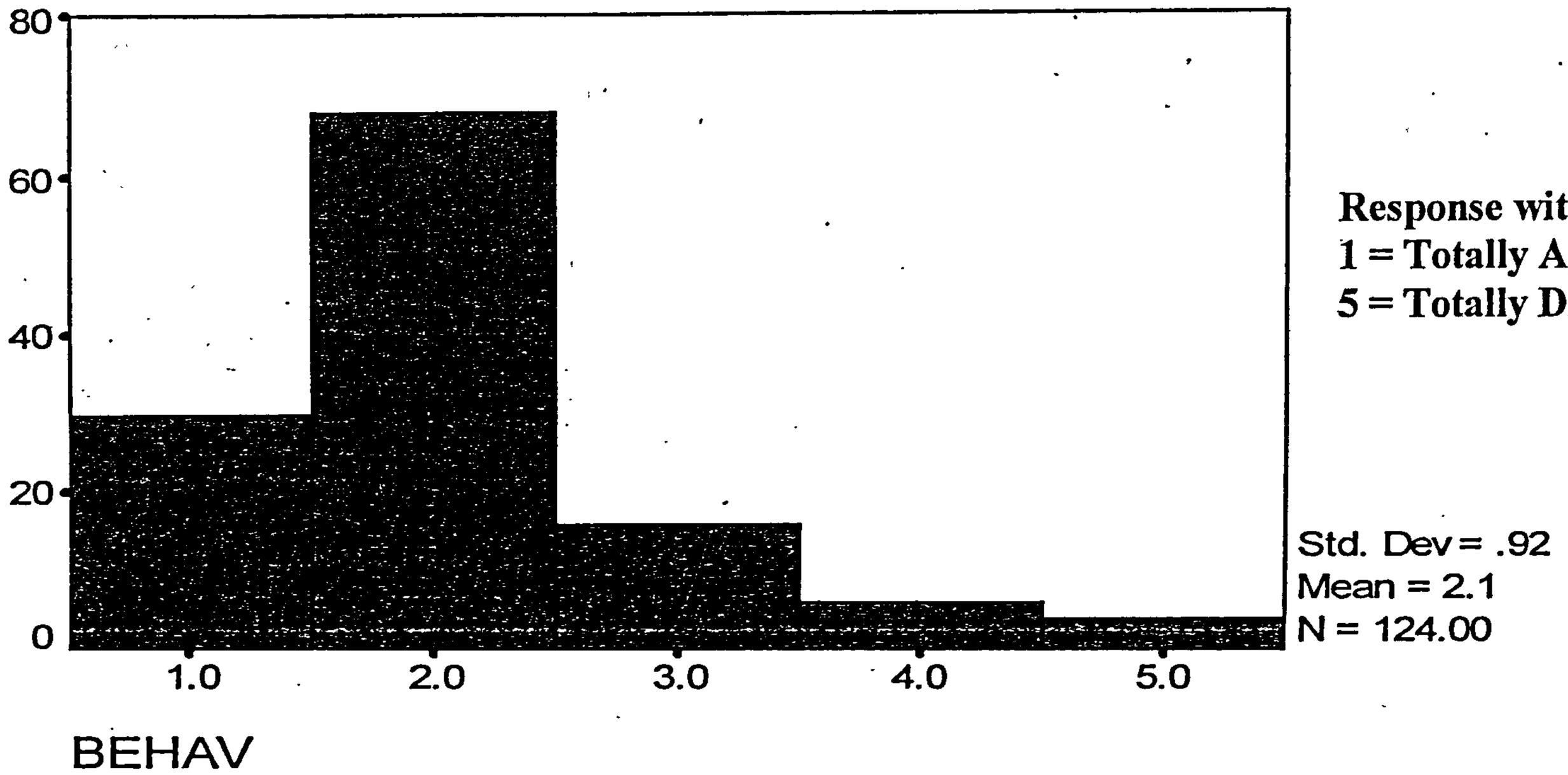
Hypotheses	Constructs	Test Result	2 - tailed Signifi -cance	Accept or Reject (H_o)	Comments
Hypothesis 1					
H_1 $H_{0\text{-}1}$	BI and B	Pearson r = 0.5708	p = 0.000 (*t*)	REJECT $H_{0\text{-}1}$	1. There is a ***relatively strong*** linear relationship between Behavioural Intention (BI) and actual trust Behaviour (B)
Hypothesis 2					
H_2 $H_{0\text{-}2}$ $H_{0\text{-}2alt1}$ $H_{0\text{-}2alt2}$	ΣAact & BI $\Sigma Aact_{2\&3}$ & BI $\Sigma Aact_{2\&3}$ & BI	Pearson r = 0.5439 Pearson r = 0.5893 MLR $R^2 = 0.35$	p = 0.000 (*t*) p = 0.000 (*t*) p = 0.0000 (*f*)	REJECT $H_{0\text{-}2}$ REJECT $H_{0\text{-}2alt1}$ REJECT $H_{0\text{-}2alt2}$	1. There is a ***relatively strong*** linear relationship between sum of all Attitude scales (ΣAact) and Behavioural Intention (BI) 2. There is an improved ***relatively strong*** linear relationship between $\Sigma Aact_{2\&3}$ and Behavioural Intention (BI) 3. The Expectancy-value element, 'Attitude' ($\Sigma Aact_{2\&3}$) works toward helping our understanding of Behavioural Intention (BI).
Hypothesis 3					
H_3 $H_{0\text{-}3}$ $H_{0\text{-}3alt1}$ $H_{0\text{-}3alt2}$	$\Sigma b.e_{1\text{-}7}$ & ΣAact $\Sigma b.e_{2,3\&4}$ & ΣAact $\Sigma b.e_{2,3\&4}$ & $\Sigma Aact_{2\&3}$	Pearson r = 0.0590 Pearson r = 0.2798 Pearson r = 0.3011	p = 0.515 (*t*) p = 0.002 (*t*) p = 0.001 (*t*)	ACCEPT $H_{0\text{-}3}$ Ambiguous $H_{0\text{-}3alt1}$ REJECT $H_{0\text{-}3alt2}$	1. There is ***no*** linear relationship between the sum of all 7 b.e items and ΣAact 2. There is an improved ***ambiguous*** linear relationship between $\Sigma b.e_{2,3\&4}$ & ΣAact 3. There is an improved ***satisfactory*** linear relationship between $\Sigma b.e_{2,3\&4}$ & $\Sigma Aact_{2\&3}$
Hypothesis 4					
H_4 $H_{0\text{-}4}$ $H_{0\text{-}4alt}$	SN and BI $\Sigma Aact_{2\&3}$ SN and BI	Pearson r = 0.6896 MLR $R^2 = 0.57$ (Increase of +0.22)	p = 0.000 (*t*) p = 0.0000 (*f*)	REJECT $H_{0\text{-}4}$ REJECT $H_{0\text{-}4alt}$	1. There is a ***strong*** linear relationship between Subjective Norm (SN) and Behavioural Intention (BI) 2. Inclusion of a Subjective Norm (SN) element with Expectancy-value to create Reasoned Action, works toward improving our understanding of Behavioural Intention (BI).
Hypothesis 5					
H_5 $H_{0\text{-}5}$ $H_{0\text{-}5alt}$	$\Sigma nb.mc_{1\text{-}8}$ and SN $\Sigma nb.mc_{1,2,3\&8}$ and SN	Pearson r = 0.4477 Pearson r = 0.4979	p = 0.000 (*t*) p = 0.000 (*t*)	REJECT $H_{0\text{-}5}$ REJECT $H_{0\text{-}5alt}$	1. There is a ***moderate*** linear relationship between $\Sigma nb.mc_{1\text{-}8}$ and SN 2. There is an improved ***moderate*** linear relationship between $\Sigma nb.mc_{1,2,3\&8}$ and SN
Hypothesis 6					
H_6 $H_{0\text{-}6}$ $H_{0\text{-}6alt}$	PE & BI $\Sigma Aact_{2\&3}$ SN, PE and BI	Pearson r = 0.5708 MLR $R^2 = 0.58$ (Increase of +0.01)	p = 0.000 (*t*) p = 0.0000 (*f*)	REJECT $H_{0\text{-}6}$ REJECT $H_{0\text{-}6alt}$	1. There is a ***relatively strong*** linear relationship between Past Experience (PE) and Behavioural Intention (BI) 2. Inclusion of Past Experience (PE) with Reasoned Action, works toward improving understanding of Behavioural Intention (BI).

Hypothesis 7					
H_7 $H_{0\text{-}7}$	$\Sigma CTI_{1\text{-}10}$ & PE	Pearson r = 0.8947	p = 0.000 (*t*)	REJECT $H_{0\text{-}7}$	There is a ***near perfect*** linear relationship between $\Sigma CTI_{1\text{-}10}$ & Past Experience (PE)
Sub - Null Hypothesis 7					
$H_{0\text{-}7\text{-}1}$	AVAILA & PE	Pearson r = 0.5137	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}1}$	1, There is a ***relatively strong*** linear relationship between the trust condition of ***availability*** and past experience (PE)
$H_{0\text{-}7\text{-}2}$	COMPE & PE	Pearson r = 0.7307	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}2}$	
$H_{0\text{-}7\text{-}3}$	CONSI & PE	Pearson r = 0.8251	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}3}$	2. There is a ***strong*** linear relationship between the trust conditions of ***discretion, openness, competence, fairness & loyalty*** with that of past experience (PE)
$H_{0\text{-}7\text{-}4}$	DISCR & PE	Pearson r = 0.6741	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}4}$	
$H_{0\text{-}7\text{-}5}$	FAIRN & PE	Pearson r = 0.7331	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}5}$	3. There are a ***very strong*** linear relationship between the trust conditions of ***consistency, integrity, promise-fulfilment & receptivity*** with that of past experience (PE)
$H_{0\text{-}7\text{-}6}$	INTEG & PE	Pearson r = 0.8256	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}6}$	
$H_{0\text{-}7\text{-}7}$	LOYAL & PE	Pearson r = 0.7827	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}7}$	
$H_{0\text{-}7\text{-}8}$	OPENE & PE	Pearson r = 0.6735	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}8}$	
$H_{0\text{-}7\text{-}9}$	PROMI & PE	Pearson r = 0.8168	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}9}$	
$H_{0\text{-}7\text{-}10}$	RECEP & PE	Pearson r = 0.8168	p = 0.000 (*t*)	REJECT $H_{0\text{-}7\text{-}10}$	

HISTOGRAM OF RESPONSE TO SURVEY QUESTION No.15

To what extent do you agree or disagree with the following statement

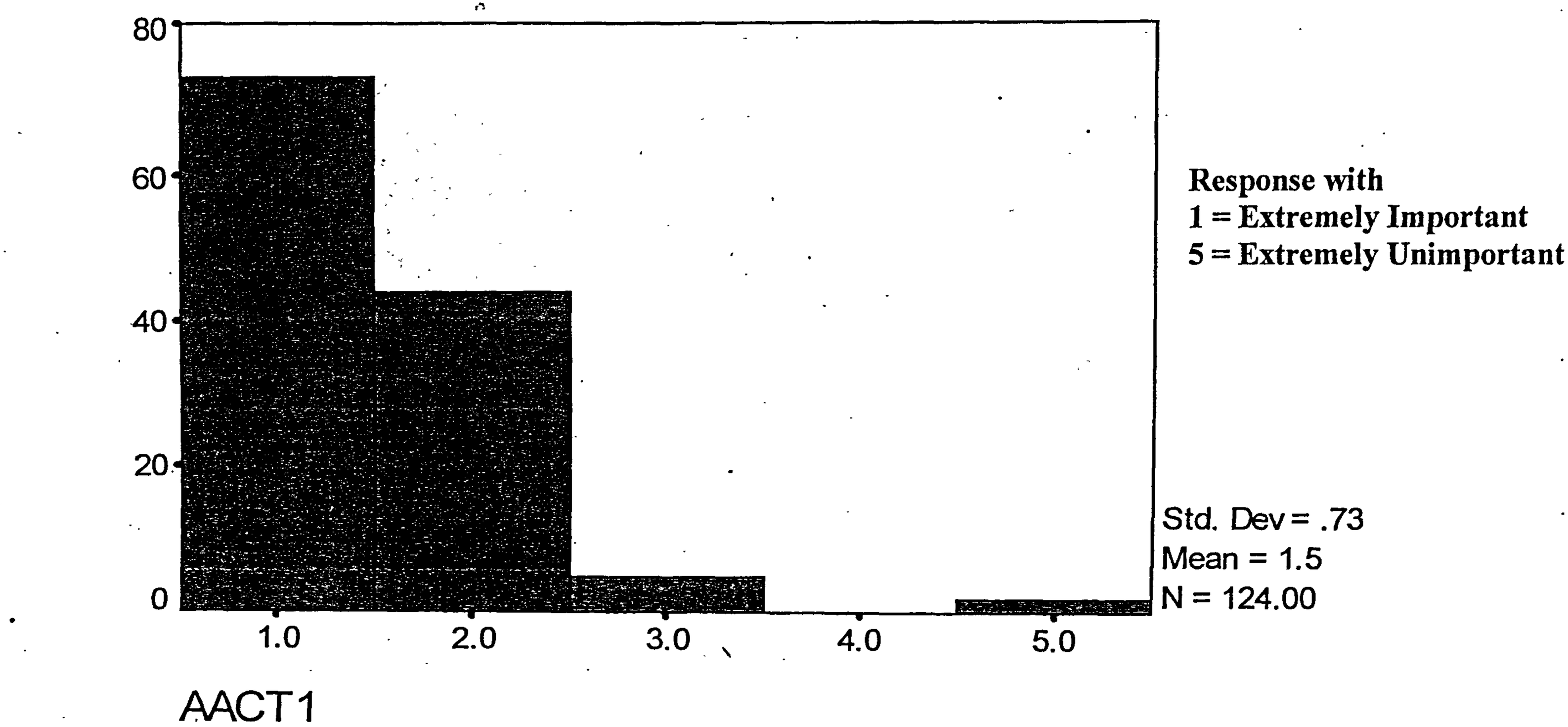
'In the event you employed them again, you would give this contractor a high level of trust'



HISTOGRAM OF RESPONSE TO SURVEY QUESTION No.13(a)

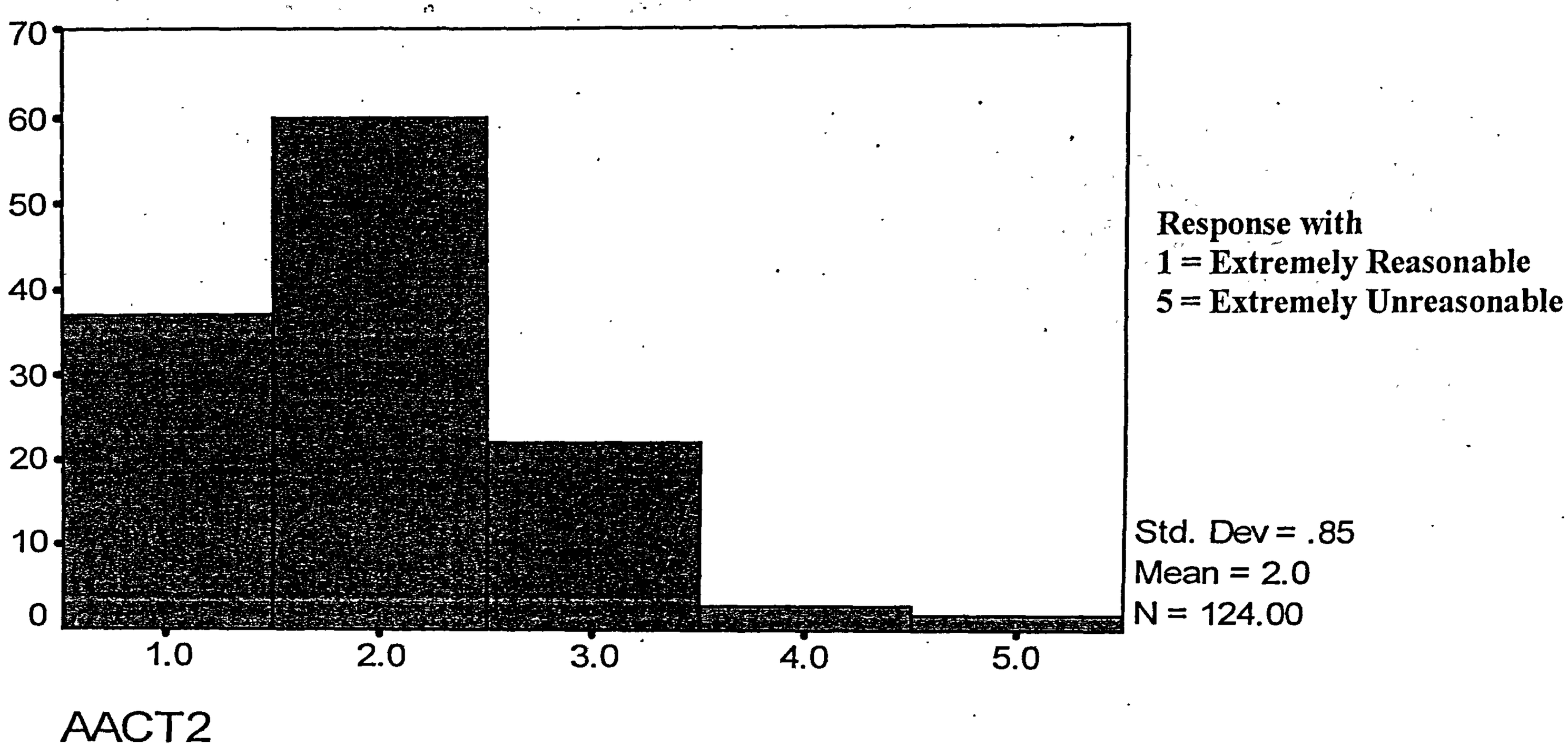
Appendix E.3

Trusting the contractor would be :



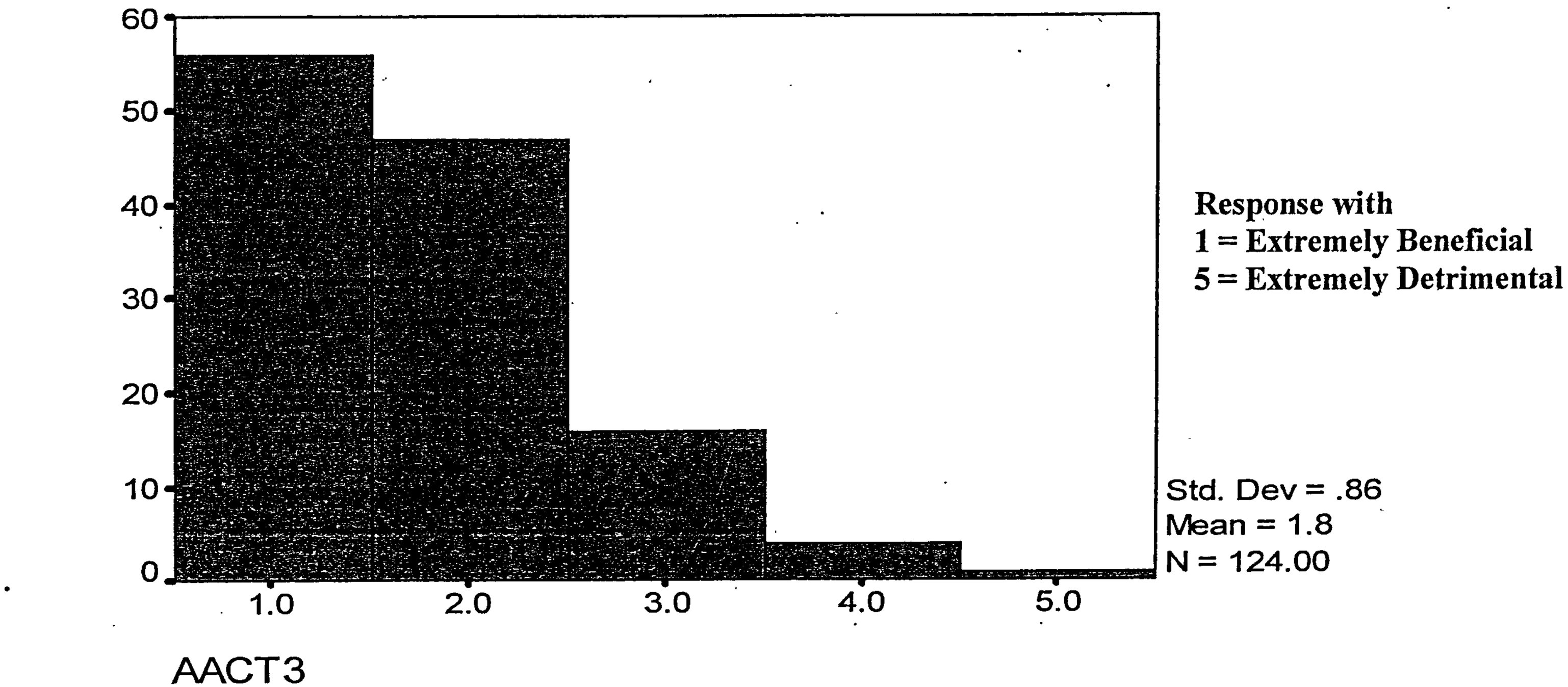
HISTOGRAM OF RESPONSE TO SURVEY QUESTION No.13(b)

Trusting the contractor would be :



HISTOGRAM OF RESPONSE TO SURVEY QUESTION No.13(c)

Trusting the contractor would be :



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